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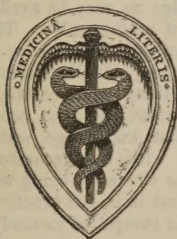
MENTAL SCIENCE

Published by Authority of the
Association of Medical Officers of Asylums and Hospitals
for the Insane.

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“IN adopting our title of the ‘Journal of Mental Science, published by authority of the Association of Medical Officers of Asylums and Hospitals for the Insane,’ we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is, in its sociological, point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say, that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains, immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the ‘Journal of Mental Science,’ although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study.”

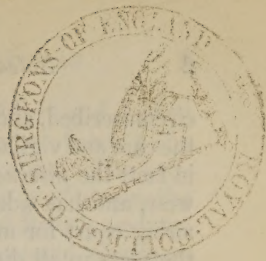
J. C. BUCKNILL.

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THE JOURNAL OF MENTAL SCIENCE.

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VOL. VIII.

Notes on Asylums and the Insane in France and Belgium. (July and August, 1861.) By W. CARMICHAEL McINTOSH, M.D., Certificated Student in Medical Psychology and Mental Diseases, University of Edinburgh, Assistant-Physician and Superintendent, Murray's Royal Asylum, Perth.

At a time when so much public interest is manifested in lunatic asylums and their inmates, it scarcely requires the memory of the illustrious Pinel, Esquirol, and Guislain, or the knowledge of what has been done by the present Morel, Baillarger, Falret, Moreau, &c., to tempt one over the Channel, more especially when a visit to the far-famed Gheel is contemplated. So in July and August last, having leave of absence from my duties to spend some weeks in rest and recreation, I resolved to find both in a visit to the French and Belgian asylums, having learned by experience that to travel without an object is neither profitable nor pleasant. Believing that what interested me, and regarding which my curiosity had sometimes been excited at home, might not be devoid of interest to others, I made "notes" regularly of what I observed, recording facts and impressions on the spot and on the day, rather in the order of observation than of coherence, and striving only to observe well, and to state the exact truth.

The first institution for the insane I visited was the well-known *Bicêtre*, an establishment solely occupied by males. This appears, on the whole, to retain a good deal of the old prison or barrack look about it, and much of the building is very antiquated. It stands in a bare, airy position, at some distance from the barrier of Paris, and does not look very inviting from any point of view. The grounds are

circumscribed, and surrounded by a high wall, and this, together with the care and vigilance of the attendants, makes escape exceedingly rare, in fact, the *interne* said, "impossible." The entrance gate faces the west, and has side lodges attached. Immediately within this is the airing court for male paupers (not lunatics), who were squatted on the seats in all directions, or took airing under the shady trees which lent a refreshing coolness to the somewhat sultry atmosphere. The quarters of these paupers were very comfortable, their beds being arranged in long wards, evidently with a most scrupulous care for order and cleanliness. Several old men were sitting at their bedsides reading; they spoke cheerfully, and seemed happy and contented. The bedding was excellent, and beneath each bed a sliding iron drawer was attached, for holding the effects of the occupant. They have access to a very small library on the north-west side of the court. The latter had enclosed flower plots and shrubs, as well as rows of fine trees, the intermediate portions being paved with causeway stones. Benches were scattered here and there, and were generally filled by groups of the paupers. One old man was an excellent example of chorea, his arms and face twitching and jerking in all directions.

The workshops belonging to this department are on a great scale, and embrace many trades. Several blind men were at work here, filing horns, working in iron-wire, &c., most industriously. Other men make clothes-pins, work in iron and brass, or follow the occupations of painter and joiner. They appeared quiet and happy. One came out and spoke a little English, and was proud to be able to speak to a foreigner in his own tongue; he had formerly been in England. A powerful steam-engine pumps water from a very deep well into a reservoir. The bottom of the well and the iron descent ladders are seen by the aid of an efficient reflector placed at its summit.

In the hospital for medical and surgical cases (non-lunatic) most of the beds were occupied. They each had a set of curtains of pearly whiteness, which, with the neat, clean bedding, and waxed oak floor, gave the place an air of tidiness and comfort. Some of the females in attendance on these wards seem very young.

The lunatic portion of the establishment is separated from the others by high walls and gates. We first entered an airing court planted with pollard lime trees, which screened the inhabitants alike from the warm sun and passing shower; while flower mounds, neatly railed off, added beauty to the otherwise prison-like court. There were a great many patients walking about, some quiet and melancholic, others obstreperous and forward. None of these had on camisoles. Opening under a veranda on the south side of the court were the single bedrooms for the troublesome patients. They

had a dismal aspect, were without windows, and bolted and locked from the outside; two bolts, one above and the other beneath the lock, added security and solidity to the door when shut. The bedding in these, however, is good; the under mattress is of straw, the upper of wool. One accustomed to the flat bed of British asylums is struck with the deep aspect presented by them here and elsewhere throughout these establishments; the bedclothes and mattresses are about two feet in depth. At the south-west corner of this airing-court, there was a small ward, containing two beds, the occupants of which were in a state of acute mania,—one of three weeks' duration. The most furious had his camisole tightly round him, securing arms and hands, while stouter bands firmly fixed him to the bed. He was a young man, and he writhed his powerful muscles till the whole bed quivered, spitting fiercely at the wall or the passer by, as an outlet to his imprisoned vigour. His iron bed had sides about eighteen inches in height, and softly padded; one of them folded down. The other patient was equally well fastened to the bed, but his arms were drawn straight by the sleeve ligatures being tied to the foot-rail. No argument could persuade the *interne* that it was possible to do without restraint in such cases.

The ordinary dormitories had an infirmary look, as well as the superior beds and bedding generally throughout the house. The floors were for the most part of polished oak, and some had the central portion paved with tiles. A cylindrical stove occupied the centre.

The ordinary airing-courts were much like those above described, and canvass dresses might be seen here and there amongst the occupants. The refractory-court was paved with causeway stones, and had a double row of trees in the centre, with an awning or veranda at each side. Four or five patients had on camisoles; one, an idiot, was firmly bound to his chair.

In one kitchen, and in several of the dining-rooms, I had an opportunity of witnessing the laying out of the supper. The dishes were the ordinary large, heavy, earthenware plates, shaped like a saucer; the drinking vessels were neat glass tumblers. In one, an infirmary ward, the diet consisted of meat and vegetables, with about a glass and a half of wine; in others, bread, red currants, and wine. The whole of the dining-rooms had their tables carefully laid out and ready before the patients were admitted. A large piece of bread lay at the head of each for division into nine, that being the number apportioned to the table. The spoons were of tinned iron, and of a moderate size. The tables are of neat construction; the top having an edging of wood, the rest of wax cloth.

The clothing of the patients was of divers kinds and colours, and in some cases rather shabby. Some appeared as soldiers, others as

artificers and labourers—just according to their trade; many again had coats of blue pilot cloth of a nautical cut.

They apparently had no games for their exercise and amusement, but spent their energies in the airing courts; an arrangement by no means beneficial to their health. No comparison can be made with the spacious airing grounds, daily games, and general attention to open air exercise, so common in well regulated asylums at home.

In the idiot and epileptic department were many very young, almost infants; their wards seemed crowded. Malformed heads abounded amongst these children. Special care seemed to be devoted to their training and improvement. A music school with its apparatus, and a teacher, demonstrated their belief in the potency of this useful agent. In the writing class I saw a number of the ordinary patients (not idiots) occupied at their copies, either writing, scribbling, or sketching. One man was quite an adept in ink sketches, and his figures and houses were very characteristic, putting me in mind of a certain gentleman in a Scotch asylum, who paints figures out of proportion, and places ships in their immediate vicinity no larger than a boat. Elderly females attended on the idiotic and epileptic children, and the appearance of their charges was very creditable. The beds were neat and tidy, and the wards as well ventilated as circumstances would permit. Their exercising grounds are good, and have these several arrangements:—First, a horizontal ladder, along whose bars the patients swing for the purpose of exercising the muscles of their arms and body generally. Secondly, a circular swing, like that used in our school play grounds. Thirdly, a *balançoire*, with bars at different heights. This apparatus consists of bars having transverse handles at each end, and moving through an upright pole. Two children seize the opposite ends, one pressing down while the other springs into the air, and they go on with this see-saw motion. Fourthly, a wooden horse with padded leather back, and having in front a mound of soft gravel. A boy, taking a race, performed a sort of leap-frog exercise over this, alighting on the soft gravel in front. In another portion of the gymnastic court there were two strong upright beams of wood with a cross bar at the top, from which hung two strong, twisted wire cords, having a ring at the extremity. Behind this stands a platform and stairs. A patient mounts up on this, and has the rings of the wire cords put into his hands; then with the impetus he swings forward with force into the air, passing between the upright poles, and dropping on a gravelly cushion in front. It appeared rather a violent sort of exercise. Besides these, there were leaping-poles, ordinary seated swings, vaulting-bars, and other arrangements. In the interior of a large court-house, appended to the east end of this exercise ground, were numerous articles for gymnastic purposes, and of special avail

in bad weather. Two were somewhat curious; one, a bar with wooden balls at each end, was seized with both hands, and used by bending the arms backwards over the shoulders, thus strengthening the scapular and pectoral muscles; the other was shaped like a ninepin, and the patient whirled a couple of them (one on each side) with velocity. It would certainly be prudent to "seek a secure retreat," when a number are undergoing this exercise.

The portion devoted to criminal lunatics is separated from the rest by high walls. The airing courts for these are very confined, and the health must suffer accordingly. The building is of a circular form, with the apartments radiating from a central kitchen. A passage runs round the latter, from which the patients are seen through a high iron railing. Inside the railing is a space for exercise, which, in every division, opens into two chambers—each containing its patient. They were in their rooms by the time I arrived (after 4 p.m.); some paced the space to the outside of their chamber, others were busily engaged at the newspapers.

In the quarters for the ordinary lunatics, the baths were numerous and closely set in their bath-rooms, and hot and cold water supplied to each by stop-cocks worked by keys. Two patients were fastened in baths, the water in which was certainly not over 45° Fahrenheit (for they had been in them for some considerable time). The apparatus for the douche was attached to each, and the attendant—to illustrate the working of the method—set a cold heavy plunge on the head of one of the poor fellows, fastened beyond escape beneath, a proceeding which caused intense distress to the recipient. It was stated that they found the douche of great use in repressing fury, and in carrying out habits of discipline. The patients were left in the baths.

The Bicêtre seems an excellent institution for confining lunatics, but is defective in many points of essential importance.

Salpêtrière.—The classification of the lunatic patients (all females) in this establishment is carefully attended to, a fact which accounts for the calmness pervading the general airing courts, and the unharmed and flourishing aspect of the flowers and shrubs, which are only protected by a slight railing. The courts are large and excellently shaded with trees, beneath which many females were seated sewing, &c.

The dormitories throughout were very neat and clean. The central stoves had a coating of white porcelain, and a place for heating bedding in cold weather was on the top of each. The bedding consisted of two mattresses, the lower of straw, the upper of wool; and sometimes two of the latter deepened the bed more than usual. The other clothing was of the ordinary description. For the wet patients, they had a drawer with a brass utensil, and when this was not necessary, the drawer was used as a receptacle for clothes and other effects.

By the side of many of the beds there was a neat marble-topped stand with a door, and in this a compartment for the clothing, &c., of the patient. No special arrangements existed for the washing of the patients; probably the attendants' quarter, at the end of the ward, served for such purposes, as I saw several so engaged. An attendant sleeps in each dormitory. There were some nice open verandas, where the females engaged in their work, and the paralytics reclined in chairs, protected from the sun's rays, enjoyed the fresh air.

In a refractory court there were trees but no shrubs, and the seats were quite loose. The women were certainly, on the whole, pretty decent, and though a few sabots were lying about, they conducted themselves very quietly at visit. The refractory court of M. Baillarger was peculiar in having isolated dwellings for noisy patients. The doors of these opened by a sliding lateral movement, and the floors are laid with the usual polished oak. The bedsteads were of iron, each possessing good, clean bedding, with mattress of straw; one or two had wool mattresses. There was no window, so that the apartment was quite dark when the door was shut. No urinous odour was perceptible in any of these places; in fact, there was a total absence of this throughout the establishment. Numerous fine trees dotted this airing court.

The idiots and epileptics had somewhat the same arrangements for gymnastic exercises as at the Bicêtre, the wooden horse, of course, excepted. For the *balançoire* also the females require a special dress, for obvious reasons. These wards, under the charge of M. Moreau, were very interesting. The beds of the epileptics were well padded, and some were on the floor between the others. The ceiling of this and several other apartments seemed very low, but the antiquity of the edifice accounts for such deficiencies. Many of the epileptics were busy making charpie, engaging in this occupation when quite incapable of doing anything else. The females of the Salpêtrière, in general, supply the whole of the Parisian hospitals with charpie. In this ward there were a good many wooden beds, but M. Moreau stated that they were being gradually done away with. In this department there was a young epileptic girl, who acted occasionally as interpreter, and who spoke English well. She was a very happy and contented creature, and seemed to like all around her. She told me that many of her companions had to be put in a camisole when ill and excited, and innocently added, that she herself required one last night. It appears that she is subject to severe paroxysms of excitement, being a most intelligent and industrious girl in the intervals.

The windows were of the ordinary description, and fastened by bolts, many being readily opened by the patients. When I asked if they never escaped, they replied, seldom, as they could get no further than the court; besides the troublesome were duly secured.

The paralytics generally appeared ranged in rows of chairs in the airing courts and balconies, and the cases of general paralysis in the wards of M. Baillarger were the subjects of a special investigation. Several had on camisoles, and others were strapped to their chairs.

In the apartments appropriated to the *agités*, many of the beds had rings for securing the patients at night.

I saw many of the patients at their morning meal (*déjeuner*). The tables were in all cases carefully laid out before the patients entered. Earthenware dishes were the vessels in general use, of the same shape as those at the Bicêtre. Neat, strong tumblers likewise constituted the drinking vessels. In the case of the very violent, they had pewter plates, with a projecting piece or ear, at each side. The spoons were of galvanised iron, but in M. Moreau's of wood. Nickel silver forks of the ordinary shape, and common steel knives, were lying about; the latter having a blunt point. No fear was entertained with regard to these. Wine, bread, beef, and vegetables constitute the *déjeuner*. They have two diets a day, and all seemed to have abundance of food.

In the ward devoted to the reception of the new patients, light seemed deficient; several were in bed. This arrangement renders their subsequent classification an easy matter.

The kitchen formed a lofty oblong apartment, having the furnace, boilers, stoves, &c., in the centre. There were four or five male cooks busily occupied here, and large quantities of excellent mutton and beef were lying about. The arrangements in this department augur well for culinary cleanliness and quality. They have no bakers, as bread can be got much better from Paris. The meat-safe was by the side of the kitchen.

The laundry arrangements are on a most extensive scale, and appear excellent. The washing-tubs are in long rows in stone hollows or troughs; and in addition there are large oblong basins of stone, into which pure water spouted from a central pipe. A large number of women, perhaps about eighty, were engaged in laundry duties. Near the east door of this there are two steam boiling machines, into each of which 700 *drops*, or sheets, can be put at once. Each consists of a large copper cylinder, about four feet in height, and in the centre of which a piston is in motion, causing the boiling water to well out over the clothes with every descent. The cover is balanced and pierced to permit the passage of the piston rod. The drying green is extensive and good; instead of rope, they have the connecting medium between the poles of galvanised iron wire, which is now so generally adopted. Besides out-door drying, they have steam drying on a great scale.

Of the large store-rooms for packing the washed and new clothes, the order, neatness and taste were pleasing. Every article was care-

fully folded (with a due regard to symmetry), and placed in its appropriate shelf with the greatest regularity. The shelves were quite open, the only protection to the clothing being a cotton screen; ventilation would thus seem to be attended to after the articles were put in store. In most of our British asylums the labour and care bestowed on making the shelves so attractive would be considered somewhat extravagant, but far other are the Parisian ideas. Open slides hoisted articles from the ground floor to this apartment. Beneath this is the sewing room, in which a large number of females sat round tables making and mending, superintended by a matron and assistants. Besides this, there was another large sewing room in one of the wards, where upwards of 150 patients were actively and quietly working.

They sometimes have walking parties of the quiet patients, but few or no amusements. From all I could learn, few lunatic females work in the garden, or attend chapel.

By the kindness of MM. Tafforin and Carle, *internes* of MM. Moreau and Baillarger, I had the opportunity of seeing some of the life of the Parisian *interne aliéniste*. They are somewhat advanced students who enter asylums not because they intend to become specialists, although some do, but allured by the large practice and the reputation of illustrious physicians. Their duties are similar to those of our assistant-physicians, though by no means so responsible or onerous. In their official visits, they wear white aprons with a front pocket. They attend such classes as they wish at the respective Parisian schools of Medicine, but of course do not all leave the institution at once. Their rooms are ranged together in a single row, and are small, old-fashioned quarters indeed, but comfortable enough. In each you might distinguish the ruling passion of the occupant, whether it might be for books, or for preparations of anatomy and natural history, or for the less professional musical instruments, games, &c. They take meals together in an apartment far removed from their sleeping-rooms, and a happy party they make, laughing, chatting, and joking, as if the meal depended on their merriment.

On a shelf in one of the lobbies were numerous plaster-casts of the heads and necks of the insane, originally commenced by Esquirol. The advantages of such casts are very obvious; but if casts of the exterior and interior of the cranial vault had also been preserved, the collection would have been much more valuable. In regard to this, a method which I follow in the Perth Asylum (suggested by Professor Goodsir) is commendable from its simplicity. In post-mortem cases, a cast is taken of the face shortly after death; then, at the examination, one is taken of the exterior of the cleaned bony arch, and another of the interior. In cases where no post-mortem is procured, the cast of the face only is obtained. By the outside cast of the

cranium we have the most important points in the configuration of the head, by that of the interior, the general form of the hemispheres of the brain.

In this establishment pet animals for the amusement and cheering of the patients were deficient; a great many fine specimens, however, were crowded together in cages at the dwelling of the portress, but, of course, were private property.

Hospice St. Yon, Rouen.—This lies at the outskirts of the city, and is well fenced by high walls. Entering the porch, I was conducted to the bureau of M. Morel, who stated that there were many points in this asylum not at all to his satisfaction, but that the establishment at Quatre-Mares was much superior; unfortunately, however, I had no time to visit the latter. The Hospice St. Yon contains both private and pauper females. The *interne* conducted me round the establishment, first visiting some pauper dormitories for the ordinary or quiet patients. They were in exact order; the beds of the usual great depth, and very tidily made; the practice of pinning or folding the sheets tightly conduced greatly to the general neatness of the apartments. The windows were of two kinds, ordinary ones, such as exist at the Bicêtre and Salpêtrière, and windows guarded by strong iron netting. The floors of the dormitories were paved with tiles, and the dining-tables usually occupied the centre. Geraniums, balsams, and other flowers, grew luxuriantly on the tops of stoves, while numerous crosses and Roman Catholic emblems of various descriptions garnished most available projections and niches. The religious element is powerful in this fine old city, and it is no less so in its lunatic asylum; Sisters of Mercy or *Sœurs* act as matron, house-keeper and attendants. It is doubtful whether it is right to impress the insane so continually with religious feelings, as is done in France. The tables occupied the centre of the wards, and here, again, I saw them laid out for the meals. For the *gâteux* there were heavy metal dishes, shaped like those in Paris, and with the lateral projections; this class had knives and spoons to a certain extent. The orderly patients had porcelain dishes, glass tumblers, knives, and spoons. There seemed to exist no dread of knives, some of which were very sharp at the point and edge.

I must confess that I was by no means favorably impressed with the religious element in the shape of attendants either here or elsewhere on the Continent; besides, it can be easily seen that, having a sort of respect due to their sacred order in this country, their value as attendants upon the insane is materially affected. In the ordinary hospitals they are doubtless invaluable, though, it would appear, with a few exceptions. A friend in Brussels told me of a lady of rank who acted as *sœur* in an hospital to which he was attached, and whom only by the greatest firmness could he get to attend to medical orders; for she considered that her

rank and wealth were quite sufficient guarantees for her knowledge in medicinal and hygienic affairs.

The general airing courts were pretty well filled, and the patients tolerably quiet as I passed. The courts presented a central space with trees and flowers, and a porch or veranda extending round three sides, beneath which the sleeping room and gallery doors opened. The court for the turbulent had fewer trees, and bore evidence of violence and mischief; it was only separated from the others by a slight stake railing, but it appeared that this was sufficient. The private airing courts are certainly pleasing to any lover of nature, —lofty, spacious trees, beautiful flower-plots, shady walks and arbours, afford alike a fascinating picture and a composing privacy. Several ladies were enjoying the refreshing shade of the trees as they plied their fingers in knitting, or reclined on appropriate seats.

The single rooms for the dirty and troublesome patients had mattresses of straw or sea-grass. They were cell-like, had a bad odour, and the floor (wooden) was uneven and by no means closely jointed. There was a padded room for the very refractory, having its canvass painted: it seemed to be in use. On some beds in the dormitories there was a silk coverlet filled with feathers—said to be for the *gâteux*.

A separate dwelling at the back is devoted to the best class of patients, and Sisters of Mercy abounded here. On the ground-floor there is a visiting-room for patients' friends, which has quite an elegant appearance, and here as elsewhere, crosses, &c., abound. The bed-rooms are very neatly furnished, with good mahogany bedsteads—two in number, one for a patient, and one for a *sœur*, or convalescent; some chairs and a heating apparatus, with a netting at the fireplace, &c. There was a strip of carpeting at the bedside, but the rest of the floor was neatly waxed. The beds, in some instances, were placed on each side of a recess, thus making the apartment into a bed-room and a day-room. In these apartments the water-closet consisted of a simple night-stool, and nothing more, and this sufficed for a gallery. The bed-rooms and dormitories of the middling classes were tidy, the former, as usual, with two beds, but by no means crowded, as the apartment was spacious.

The baths were in a separate building; they had *douche* and *arrosoir*,—two of the latter together, which, being held by handles, could be directed against the face or any other part of the body at will. The ordinary shower-bath fell from the roof. One *douche-pipe* spirted a powerful stream of water horizontally or obliquely. The waste water from this flowed over the pavement into an adjoining apartment, which itself formed a complete bath of considerable dimensions (about twelve feet long, seven or eight broad, and about four feet and a half deep). A door at each side gave entrance to

the bathers, and from each of these apertures a flight of steps led down to the bottom of the bath. An iron railing guarded each stair and surrounded the margin of the bath. In this the patients have a cold bath for a tonic, and, according to the *interne*, no accident ever occurred in it, though it certainly seemed too deep. The garden is large, and is cultivated for the most part by the patients : rhubarb, asparagus, &c., flourished luxuriantly. The laundry is in a brick edifice separated from the rest. Bad odours were rather common in some parts of the house. A few canaries were the only animals kept as pets. The boarders get a drive into the country now and then, but the paupers, as usual, are rather deficient in gymnastic exercises, or indeed exercise of any kind. A circular swinging coach was the only article of the kind visible.

Maison d'Aliénés à Lille (des hommes).—This building is situated at some distance beyond the strongly fortified barrier of the town, and is surrounded by richly laden fields. It is the property of the monks, who reside and fill most of the situations therein. The building is a brick one, and was begun thirty years ago, additions being made from time to time as occasion required ; and at present a very large addition of galleries, dormitories, &c., is busily progressing, roofed and ready for the plasterers. There were twelve patients in the edifice at first, now there are six hundred.

On entering the gate I found several monks, who informed me that the doctor of the establishment was absent. The superior, however, conducted me round, and, by the help of a patient who spoke pretty good English, I got on nicely. Passing through a court in the centre of two long wings, we first entered a large day and dining room to the right. This was moderately filled with patients, some playing at dominos, others reading the newspapers. The latter are fastened through a longitudinal slit in a slight bar of wood, bound by a screw with a triangular key, and fastened to the table by an iron chain. The keys of the doors were all triangular, and the same key turned the screws in the belts, wrist, and foot straps, newspaper fixings, &c. This was called the bourgeois gallery. It might be fifty or sixty feet in length, and had dining tables along the sides, with forms. A bagatelle and a few other tables also existed. At the further end of the apartment a library with glass doors showed that due attention was paid to the comfort and instruction of these patients. A stove occupied the centre. The windows throughout the house had broad iron gratings corresponding to the panes, invisible from the inside when the window was shut, but appeared prison-like when the latter was swung open. The superior thought highly of this arrangement, and pointed it out with evident satisfaction. Attached to this room is an airing court with flowers and trees, and paved with bricks. Many of the patients seemed in an advanced and abject state of dementia.

The dormitories and day-rooms throughout were superabundantly supplied with crucifixes, &c., which were generally grouped at one end. At the first division of the infirmary, they had quite a little chapel (not separated by walls from the rest), with carpeted floor, raised platform, candles, &c. &c. In general, the dormitories for the orderly bourgeois and paupers had this arrangement:—on each side of the long ward were ranged the beds, with a stove in the centre. The bourgeois had carpeting between the beds, and a strip in the centre of the ward. The beds were, as usual, neat and clean, and the frames in all these were of iron, the mattresses of straw and wool, as in the Bicêtre, and the bed generally of the ordinary deep aspect. In one or two of the pauper dormitories there was a central row of beds as well as the two lateral, thus crowding into one enormous ward some sixty or seventy insane men. They were much too crowded, but of course this will be remedied when their present additions to the building are finished.

In the dormitories for the *gâteux*, the beds had straw bags. Attached to each of these beds is a strong leathern strap, with a wristlet, for securing the arm of the patient at night. For the epileptic I saw no special beds, but probably they might exist. Some of the epileptics had on padded hats, and even then their faces were cut and bruised.

The scene in the dormitories for the paralytic and furious was distressing; camisoles, straps, wristlets, leg and ankle locks everywhere abounded. Patients were tied in chairs, so that they could scarce move a muscle but those of the head, nor did they fare much better in bed. The long strings of the camisoles came into useful requisition here, lashing the arms and body to the sides and foot of the bed. Many were being taken out of their chairs by the *frères*, and put to bed at this early hour (about 4 p.m.). The chairs are solid, wooden articles, of a cumbrous appearance, with a raised portion of the seat between the knees, and a foot-board; straps with buckles hung from them in numbers. These patients appeared for the most part in a very abject condition; in fact, in such a state as I never saw the insane before. The mattresses in these cases were of straw. This paralytic ward was in great disorder, and the air very bad. The superior opened several windows as he passed.

The idiotic and epileptic patients were mostly in the day-rooms, some with leg-straps, others with wristlets. In one corner sat a poor idiot with a leathern pinafore, which hung from the root of the neck to his middle; it was bedaubed with his last meal, and wet with saliva. Camisoles were quite common both in these and other wards, as were likewise canvass dresses; the airing courts attached to this department had also a good sprinkling of both. The superior was quite astonished when informed of the state of lunatics in this and other countries, and eagerly inquired as to the method

of treating the *furieuse*. This officer is changed every three years, for what reasons I do not know, but one would imagine that such an arrangement cannot result in much benefit to the patients.

Many new wards were shown unfinished, and some so far advanced as to have beds, and those of a good shape, and of iron. Ventilation did not seem to be adequately cared for, either in the old or the new premises. The apartments were heated by open stoves.

Entering a room on the ground floor, whence issued loud screams, I found two miserable beings, yet in the vigour of manhood, fastened to chairs. One had his face all bruised, and a deep cut over the left eye,—the blood from which matted his hair and besmeared his face, while he kept up a series of fiendish yells, gnashing his teeth in bitterness. He had on a camisole with straps in all directions, and was in a very filthy condition. The other patient did not appear so much bruised, but was equally dirty. The apartment was small, badly lighted, wet and odoriferous; and there they were locked in, each keeping the other company as he best might.

The galleries for the higher class patients appeared to be mostly empty. The bedrooms in these had waxed floors, two beds, one better than the other, and simple furniture. They were out of order, however, and unoccupied.

The kitchen is large and in tolerable condition. Upon a side table lay about twenty fat Cochin-China fowls of gigantic proportions, and the odour of the place was certainly good. Monks were busy acting as cooks, cutting beef, bread, &c., and their portly figures told that they did not quite exhaust themselves at the shrine. They had numerous fine copper boilers with balanced covers. On a table was fixed a rotatory knife-machine for cutting the soup bread into thin fragments. The loaf is put in a groove which moves forward every turn, and the wheel rotated by a handle, when the thin slices are pared off with rapidity, and are collected in a box beneath. In the grounds outside, the trees and flowers were good, but the opportunities for exercise and amusement lamentably deficient. The only game they seem to have is rather a peculiar one, viz., rolling wooden wheels about ten inches in diameter along a broad ditch at a certain mark, beyond which is a pit. To run the wheels as near the mark as possible, and to be careful not to allow them to fall into the pit, are the aims of the players. Running about amongst the trees was a splendid assortment of Cochin-China fowls, and the superior seemed proud of his “Brahmapootras,” as he styled them. A few patients were assisting some masons in repairing a brick wall which had tumbled throughout its entire extent, and afforded a good view of the asylum farm and its crops. This, indeed, is a rich part of the country, and certainly I never saw better grain. The

soil, capable and fertile, is coaxed to its utmost by attention and good farming. The horses of this neighbourhood are likewise excellent, and the cattle large and heavy.

The laundry is quite rudimentary, consisting of several large tubs clustered in two small apartments, in a separate building. The superior, however, explained that this was used only for the dirtiest linen and clothes, the rest being sent regularly to a laundry in the town. The patients act as washermen. The linen throughout the house was stated to be changed twice a week. They possess extensive farm buildings, which likewise include a bakehouse, shops for carpenters, blacksmiths, &c. Some of the patients assist at these occupations, or work in the house and garden, but there seems to be a great deficiency in the affording both of work and exercise.

Many of the attendant monks were rather old men, and did not seem suitable for such a place. The medical officer and the superior monks reside in a separate house at the porch, and in this there is a good library.

Hôpital St. Jean, Brussels.—The most interesting portion of this to the alienist physician is that devoted to the reception of the insane, before transmitting them to Gheel. This consists of a dormitory and a range of single rooms, apart from the general hospital. In the dormitory, which is unoccupied at present, are the ordinary iron bedsteads and the padded epileptic ones. The single rooms are rather small and dingy. A passage runs along either side, permitting a view of the interior from a grated window on the one hand, and through the inspection apparatus in the door on the other. In the centre of these was a fixed table, in one corner a seat, and in another an arrangement for a soil-pan, communicating with the passage. A low bed occupied one side. These places had a dull, jail-like appearance. At the further extremity of the row, a padded room of the ordinary description existed. In a press adjoining this were many articles of coercion—handcuffs, anklets, camisoles, straps, &c. Some curious mouthpieces attracted my attention; the wooden gag was broad, covering the lips as well as the mouth, and to the central aperture a silver œsophagus tube, like a thick catheter, about six inches in length, was fixed. There were several varieties of feeding apparatus, but the most that can be said of them is, that they were all very strong. The only patients in these quarters at this time were—a female (a case of chronic mania) in one of the cells; and two men, subjects of delirium tremens, who were enjoying the air under a fanciful dome in the centre of the little airing court. There is a trusty attendant, who conveys the patients to Gheel and elsewhere.

Gheel.—To a stranger *en route* from Herenthals to Gheel, everything is novel. Leaving the railway at the former place, he enters a curious old coach, drawn by two rope-harnessed horses, whose

every tug threatens to snap the hempen traces. An uncouth countryman in a blouse is our driver, and, after a few stoppages, we are fairly on the track. The centre of the road is paved from Herenthals to Gheel, but the sides are left soft for the cattle wag-gons. The country around is much divided, and portioned out into little strips to suit the cultivator or peasant farmer, presenting a chequered arrangement of the fields as between Rouen and Paris, though less seen, as the ground here is level. Crops seemed, on the whole, very good, and consisted chiefly of wheat, oats, rye, potatoes, flax, buckwheat, and clover. Woods of oak, elm, poplar, and alder, dotted the pleasant fields, and here and there the deep green of the *Pinus sylvestris* recalled our own woods at home. The roads are generally very straight, and quite flat, so that it is not uncommon to see a mile or two of the line of march in front of you; and their sides are bordered with a row of oaks or other trees, planted at regular distances, giving them a very characteristic appearance. In the gardens of the peasants were cabbages, potatoes, ordinary peas and beans, French beans, &c., and often some hemp and a patch of an umbelliferous plant. Vines grow, here and there, on the walls of the cots, but the grapes seemed small and poor.

The inhabitants were busily engaged with their harvest operations, reaping the grain with a peculiar weapon, half hook half scythe, and assisting with a pronged stick, which acted as hook carrier when going home. They have rather an untidy method of binding and stacking, and generally cut out the field or patch before proceeding to the latter operation. In many parts, sheaves of flax stood drying in the sun. In ploughing, they use oxen and horses (the latter singly), and the plough is single handed. The soil is very easily worked, and it is a mistake to suppose that the arable portions are not fertile. After removing the wheat, they plough the stubble immediately, and sow a second crop for cattle forage.

The houses of the peasants in the neighbourhood of Gheel are of various kinds. In the country they are not uncommonly made of osier work, plastered with mud, and thatched with straw or reeds. Generally, however, bricks are the building materials, and they have the usual outside folding shutter, so common on the Continent. No particular neatness characterises those abodes, and the same may be said of most of those in the outskirts, and anywhere but in the central street of the town. Offensive ditches, putrid gutters, which, in some instances, course right out of the wall of the house, dung-heaps, rubbish, wood, and various obstructions are common. Even osier houses are by no means extinct in the town of Gheel itself, and the dirty, squalid appearance of the interior of these is in keeping with the exterior. Tiles of a flat shape, and thatch, constitute the roofing.

Just before entering the town you pass the new infirmary, on the

right, close to the highway, which leads into a street with several shops and workshops, together with some larger and more pretending edifices. The inner end of this opens into a large square, having the church and spire of St. Amaud at the further side, with a figure of the Saviour on the cross at the railing, and decorated with a lamp in the evening. By either side of this edifice you pass on into the principal street, which carries you right through the town.

Before giving our observations on Gheel and its present condition, it may not be uninteresting to relate a few facts regarding the population, gathered from the last report (1859) of M. Bulckens, the medical superintendent, and published separately this year (1861).* The insane population of Gheel during the last five years, dating back from 1860, has been the following:—in 1855, there were 778 insane; in 1856, 765; in 1857, 801; in 1858, 790; in 1859, 800. This shows an increase during every year except 1856, in which the number fell to seven below that of the previous one. He attributes the rise, not to the increase of the insane amongst the population in general, but to the precautions adopted by the administration for the public welfare.

With 800 insane, scattered among 11,000 inhabitants, the town and neighbourhood are of more than passing interest to the psychologist, because the system pursued at Gheel has earned for the place a very extended reputation, and has given rise to the proposed modifications of our asylums into detached blocks of buildings, styled cottage asylums, &c. Many such schemes have originated in the somewhat prevalent notion that the institution at Gheel is the *beau ideal* of good treatment for the insane. But there are many disadvantages and drawbacks modifying such a supposition, which are only too patent to the practical investigator. Moreover, so far are the authorities—medical or other—from supposing that the system there pursued has been unexceptionable, they have recently erected a considerable asylum (called an infirmary), in which the noisy, very dirty, and sick, are to be treated. They thus clip the “air libre” from a certain portion of the community, and assimilate the whole system to that proposed by several original (and other would-be) schemers for the amelioration of the insane in this country, viz., a central building of some size, with detached cottages.

At Gheel, the patients may be conveniently divided into two great classes:—1. Those in the town; 2. those in the country. More minutely into:—1. In the hamlets in the centre of the village are divers insane, curable and incurable, whose physical state or moral

* Various able articles on the Gheel question have appeared in the ‘Journal of Mental Science,’ and the ‘Psychological Journal,’ &c., by Drs. Browne, Coxe, Munday, Stevens, Sibbald, and others, while French and Belgian literature is voluminous on the subject. The above was out of my hands before I was aware of Dr. Coxe’s recent paper.

reclamation render them the special recipients of frequent and continuous attention. 2. In the houses next these are to be found the imbecile, mischievous idiots, maniacal, the excited, demented, and the paralytic. 3. In the third section, composed of houses at a distance from watercourses, are placed, as far as convenience will allow, the epileptic. 4. In the houses still more remote, in the habitations on the moors, hard by the woods, are the violent, the turbulent, furious, the indecent, and all those who require special measures of discipline.* M. Bulckens makes the following commentary on the latter cases:—"Exercise is an instinctive craving of the maniacs; we isolate them, but we permit them to have free air for the unreserved use of every muscle, for their vociferations, for their gestures. Their excitement, meeting no obstacle, shows itself freely, but it is not long in exhausting itself. Having no other hearers than the woods, the moors, and the feeble report of the neighbouring echoes, the insane are but little encouraged to repeat their boisterous conduct. So true is it that a man, in a state of reason as well as in a state of madness, often requires an audience for the production of certain bizarre actions, and to find a stimulant to his eccentricities."

For taking charge of the 800 lunatics, there were, at the last general census, 617 *nourriciers* or peasant attendants. Of these, 280 have one chamber for the insane; 297 have two chambers; 32 have three, and 8 have four. The colony is divided into four sections, which, without being precisely limited, are nevertheless practically adopted. Amongst these are scattered the 11,206 inhabitants, who possess 1,913 houses. The town includes about a third of the whole houses and *nourriciers*. The following table from M. Bulckens' report, gives us the occupations of the *nourriciers*, and may prove useful for comparison:

Husbandmen	372	Turner (wood)	1
Shopkeepers	25	Dyers	2
Shoemakers	17	Rope-makers	2
Tailors	14	Saddlers	2
Joiners and Cabinet-makers	16	Tanners	2
Wheelwrights	5	Millers	3
Gardeners	7	Braziers	3
Bakers	8	Carriers	4
Butchers	5	Canteen-keeper	1
Weavers	7	Employés connected with common affairs and the insane	10
Day-labourers	10	Justices of the Peace	2
Tavern-keepers	32	Teachers	5
Locksmiths and Blacksmiths	7	Veterinary Surgeons	2
Dressmakers	4	Apothecaries	2
Lacemakers	8	Doctor	1
Barbers	5	Manufacturer of Tobacco	1
Sabot-makers	9	Householders	10
Masons	4		
Slater	1		

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* 'Rapport sur l'établissement d'Aliénés de Gheel,' par M. le Dr. Bulckens, 1860.

M. Bulckens paints the relations of patient and *nourricier* in glowing colours, averring that they live on terms of brotherly equality. The lunatic is not regarded as a person of inferior mind. "The free life and family community, set apart for our insane, presents a spectacle, truly remarkable, daily unfolding scenes the most touching. It is in short, a phenomenon worthy of admiration, and perhaps without analogue in the world, in that we have about 800 insane, of different nations and tongues, placed in different social conditions, having different manners, customs, and religious observances, circulating freely in the midst of a population of 11,000 inhabitants, composed of Flemish countrymen, simple, modest, and sincere Catholics; to see such a number of insane, male and female, living in complete security, in families, and enjoying with a kind of discernment, the liberty which is accorded them." Nor is he less enthusiastic in defending them from all aspersions as to "degeneration by contact." "It is incontestable that the continuous contact of so great a number of individuals bereft of their reason in divers degrees, that such cohabitation and intimate relations impress a characteristic stamp on the *nourriciers*, which distinguishes these inhabitants from the other communities in the country. In irony, the originality of the Gheeloise character is too frequently ascribed to the affinity of causation betwixt their moral dispositions and the state of the unfortunates whom they receive with so much kindness. That is a grave error, since, for many centuries, the inhabitants of Gheel have exercised with impunity the charitable functions which Providence seems to have devolved upon them. Far from finding a people subject to the influence of a long-continued morbid degeneration, we encounter a vigorous population, and intelligent and valuable sick-nurses, who have preserved intact both their moral conscience and their reason." "Independently of the robust constitution which characterises the Gheeloise, they are distinguished for their excellent moral dispositions, for a native virtue, simplicity, and aptitude, and for their affectionate feelings, which induce them to exercise for their fellow-creatures true charity without ostentation."

By the kindness of M. Bulckens, the *Médecin-inspecteur*, I visited, in company with him, throughout the town, numerous cases of dementia, melancholia, chronic and periodic mania, epilepsy, idiocy, &c. Many of the females were cheerfully engaged sewing, others winding flax for spinning, preparing vegetables for food, or attending to the children. The male patients assisted the *nourriciers* at their various trades, such as tailoring, mason and joiner work, sabot making, or rocked the cradle and did house work. In one apartment sat a female melancholic, aged sixty, with folded arms, refusing to work, in a dejected and comfortless condition. Many of the patients came from the back apartments, while others were

brought from the gardens. A suicidal melancholic sat on a chair in a dirty back court, sullen, obstinate, and perverse; she seemed dirty and neglected, but in keeping with the premises. A young hysteric woman appeared in another dwelling, with a saffron poultice to an inflamed eye, speaking pleasantly and intelligently; a contrast to her *nourricier*, a young Gheeloise woman. In the street were several imbeciles, carrying the children of their guardians with great glee, and evidently quite in their element. This maternal instinct is often extremely well shown amongst the insane. In the Perth Asylum there are two very strongly marked examples. One, a case of erotomania, for a year or two carried a large doll, which she attended with most assiduous solicitude. It was her companion by day and night, and she was never happy without it. She heard it speak during the night, and repeated its sayings to me in the morning. Regularly at meals she attempted to feed it with a spoon, and, at last, having effected an entrance into its mouth, was quite delighted to see the liquids disappear in its interior. This, however, proved anything but agreeable, as it was stuffed with horsehair, sea grass, &c., which materials soon began to rot, and cause a putrefying odour. The face got damaged with her constant feeding, and gave way, and a second head fared no better. She was refused another; and I found her one morning with a certain vegetable, which she had procured from the kitchen, duly installed on its shoulders, carved and embellished with coal eyes. The doll had ultimately to be removed, a circumstance which plunged her into great grief for a time, and she begged hard that it might have a decent funeral. Its shade appeared to her in visions for many a day; and she solaces herself at present by carrying a small carved image in her pocket, which she also endeavours to feed. The other, a case of dementia, now carries her "baby," of which she is, on the whole, more careful, the most conspicuous defect being the loss of the paint from its face by constant kissing. When at chapel, or other place to which she is not permitted to carry it, she lays it carefully on bed or sofa, otherwise it is her companion day and night. Where insane females can be trusted with living children, the effects of fostering this instinct would seem to be beneficial, conferring contentment and happiness on such patients, who are led away from the thought of their own circumstances in expending their energies for another.

Upon a log in the principal street sat an imbecile man, blind of an eye, and beside him a boy, who was annoying him by putting sticks and rubbish on his shoulders and neck. This brings out another point in the Gheeloise treatment, viz., the annoyance and irritation many must receive from the thoughtless young, who are surely not so widely different from those of other countries. I observed several such cases. Some of the loquacious females were profuse in little complaints, which they recited to the amiable

doctor. A lad of twenty presented himself on the road in an excited condition, accusing some one of tearing his blouse, ill using him, and bruising his ear and temple. Certainly the upper part of his right concha was bloody and bruised, but the lad was stated to be of an obstinate temper and unruly disposition. The interior of the houses in the town presented very novel features. The great preponderance of the religious element was striking. In every house religious statuettes, figures of Christ on the cross, Virgin Mary and Child, crosses, rosaries, Catholic trinkets, bedecked with flowers and resplendent with gold leaf, red and blue, garnished the recesses, shelves, glass cupboards, and prominent portions of every wall. An eight-day clock of gaudy aspect, rows of plates and glasses, were also common. The real old Flemish dwelling, however, is met with in perfection only in the surrounding country. The inhabitants (female) were engaged in domestic duties, or sat working the famous lace of this district. I did not see any of the patients occupied at the latter work, though it is probable they assist.

At the back of one house, on the right side of the principal street, was a female with her hands muffled in leathern gloves, continuous with a belt which bound them to the waist, while her ankles were tied in the usual way. A chain and straps bound her to the out-house. One cannot well understand how this occurs in the free colony of Gheel; surely it is the "air libre" system with a vengeance. There she stood all day, I suppose, for the spot had an air of constant use; nor could she move further than a pace or two. Her case was one of periodic mania. In this neighbourhood were several idiotic boys, whose heads, ears, and forms were no less deviations from the symmetry of nature than their minds from the normal standard. The patient in most cases was evidently one of the family, but often an inferior one. On our road to the "petit infirmerie" we met a man with a young woman (a puerperal case) who had wandered from her *nourricier*. I afterwards saw her in her home.

The infirmary is a one-story brick and tile house, with small apartments, containing stool chairs and iron beds. The female in attendance turned out a number of hand and foot locks, muffs, &c., which seemed in present use. No patient was seen in the house at this time, but I was not in all the apartments. At a second visit I made a more minute investigation, and found the bedding and apartments very clean, the floors covered with pure white sand, arranged in an artistic manner round the furniture. There were two or three wooden baths of the ordinary shape. In this house, as in several others, there existed an apartment, at present in use, devoid of light, except such as entered by the open doorway, and, of course, when occupied by the patient, it was quite dark—no, I must not say it was quite dark; for, on shutting the door, I found that a ray of light

entered by an aperture on a level with the floor, through a gutter—an arrangement forcibly reminding one of the economy of the stable. There was no defence to this opening, it was always patent. However great may be the advantages of this aperture in regard to the washing and “air libre” system, yet the apartment is only suited to remind one of bygone times, when our insane were huddled in cellars and cavities beneath stairs, lighted and fed through an aperture in the door. An excited female, disposed to wander, engaged the attention of the woman in charge at my second visit. Of this erection M. Bulckens says, “In spite of all its defects, our little infirmary has many a time been a great assistance. In a case sufficiently frequent—that of refusing food, a tendency to suicide, a propensity to mischief, excitement and maniacal fury—we have obtained remarkable succour. We have the well grounded hope that the results will be still more numerous and favorable when the large infirmary is opened.”

The new infirmary is a large brick edifice, just built, but not yet finished internally. The foundations are of dark grey granite. It looks well from the front, though the closeness of the gates and lodges gives it rather a prison-like aspect; it faces the north-west, and the road from Herenthals to Gheel. At each side a large projecting wing, connected by the front railing, bounds the entrance area. Two small lodges, each of a single apartment, are situated at the gate. Altogether it reminds one of an asylum rather than an infirmary, and certainly its internal arrangements savour more of the former than the latter. It is, in fact, an asylum in every sense of the word, and more guarded than any of our British institutions of a like nature; while the want of a fine lawn, large garden or grounds (there is but a small portion of ground recently planted belonging to it), makes it appear harsh and jail-like. Its appearance, however, will be much improved in future years by the growth of the trees and hedges. Bolts and locks, with keys *en suite*, and other arrangements for security, are quite in unison. An asylum at Gheel seems a contradiction, but assuredly such it is. This building is not a retreat for the invalid and ailing, but its whole economy is adapted rather to the furious and troublesome than to the sick and bedfast. In a sense, it is no longer the free Gheel, whence alienist physicians might mark our cumbrous institutions for attack, and contrast the perfect liberty, the confidence, and respect—the lot of the Gheeloise patient—with the stricter seclusion, mistrust, and all but degradation, which we show to our insane. But we do not assert that Gheel has changed for the worse; by no means; it has just come to that state of matters (a central building with surrounding cottages), the consideration of which is so stirring psychologists in this country just now, and resulting in the promulgation of experienced and matured judgments, or else in the vapourings of “original” theorists. Gheel

has seen the disadvantages of treating all cases on the same principle, and has built the present edifice as a tacit recognition of former deficiencies, and the exhibition of a laudable spirit of improvement. The bold advocate for the destruction of all large asylum buildings, and the substitution of the *patronage familial*, sees the very keystone of his fabric gone. The ridiculer of the *air libre* and Gheel system rejoices, perhaps, in seeing his prediction fulfilled. But the more moderate alienists recognise a judicious measure and praiseworthy progress in this most interesting spot.

The building, then, is situated on a sandy spot at the outskirts of the town, about six minutes' walk from its centre. It has a supply of pure and drinkable water, in fact "*il satisfait à toutes les conditions de salubrité et d'hygiène.*" Entering at the front door, we find on either side (for the building is symmetrical) the kitchen and culinary apartments. Running backwards from the centre are the bath-rooms, with a covered veranda facing the airing court, which is in the same line on each side. The baths are three in number on each side, of zinc, and surrounded by a layer of bricks. The partitions between them, as usual, do not reach the roof. Hot and cold water come from two pipes, meeting in a cavity at the foot of the bath, though the contents do not mix. Each sends its current into a channel along the top of the bath, whose cavity it enters by a row of small apertures extending nearly to the other end. At the one extremity there is an indentation for the head. In another bath-room is a loose copper bath for the *gâteux*, with canvas cover, jugular aperture, and numerous straps. The laundry is concentrated into two apartments just behind the middle of the front building.

The next transverse range of building (proceeding from before backwards), consists of a row of single apartments for the new comers. They are characterised as "*Les chambres d'observation, au nombre de quatorze, sont réservés aux malades entrants, qui n'y séjourneront que le temps nécessaire à l'étude de la maladie dont ils sont atteints.*" These are rooms about twelve feet long and eight feet broad. In one corner is an aperture over a pan, with an opening into the gallery on the south side. The door of each has a strong lock, besides a bolt above and beneath it. A window, very prettily barred, admits secondary light, and places the occupants under surveillance. The floors are of well-jointed oak. The corridor on either side of these apartments is wide and spacious, the windows looking into the airing courts. The panes of these were of such a construction that, if broken, they would easily permit the passage of a man. In these, as in the windows throughout the house generally, the lower portions opened readily, affording free aeration, but guarded by the cast iron balcony. The apartments resembled those in the female asylum at Ghent, Hôpital St. Jean, Brussels, and others,

which have been the models, though I think they have slightly improved on them, in space at least.

Not a single watercloset exists in the house, and this must prove disagreeable. That the attendants should always be ready to run when there is any filth in the pans is rather more than can be expected; and it must favour an unhealthy tendency during the warmer parts of the year. The pans are an imitation of waterclosets, but want most of their good qualities. The abundance of water stated to be present might have tempted another arrangement.

In the airing courts on each side of the bath and laundry range, as mentioned, there is a nice veranda, which is paved with hard bricks. Close to this is an iron pump of good construction, at the service of the patients, and this must prove a great boon to the inmates during the heats of summer. During winter, however, the slippery mass formed round it might cause disagreeable consequences. In the two airing courts behind these the pumps are partly of wood and partly of iron, and are situated in the corner.

The building at the rear is for the noisy and outrageous—"Les deux pavillons d'isolement seront affectés aux malades qui exigent un isolement temporaire, soit pour calmer leur paroxysme mental, soit par mesure de sécurité publique."

The other accommodation consists of two chambers, each for five beds, to be used as infirmaries for the sick; six apartments capable of holding twenty beds in all. The larger dormitories appear to be well ventilated; apertures exist in the ceiling and walls, as in Guislain's Asylum at Ghent. The apartments for single patients look well, as also the attendants' rooms. The *réfectoire* beneath (on the ground flat) is cheerful and spacious. All these have ordinary deal flooring.

The principal stair is of the fine grey granite, and quite spacious, affording a splendid leap for a patient so inclined. On the first landing there is a store room. A flight of wooden steps leads to the attics, but these are probably intended for lumber.

The east wing in front is destined for the house of the medical superintendent, the west for the bureau and business apartments.

All the windows, which open on the swing principle, shut by keys, except of course the lower part with the iron balcony, which is at the will of the patients. The doors have double locks; a small round key, and a larger intricate one beneath. There was no provision for fires in the dormitories, &c., but stoves will probably be added ere this. Besides the front gate, there are other two opening into the airing courts behind.

Dr. Bulckens kindly sent one of his secretaries to act as my guide in investigating the surrounding country, and with him I visited many cottages, both in and out of town. In addition to this I examined many houses of patients alone, or rather along with my

father, paying especial attention to their internal arrangements for the lodgement of the unfortunates. In the country, many of the patients were engaged out of doors, gathering or chipping firewood, herding the cows or attending to the children—the favorite occupation. A female met us at the west end of the village, gaily singing, and apparently quite unconcerned at the passers by. Many of the women were in bed, having retired to their apartments for quiet and sleep, a habit and privilege which seems prevalent, especially in the case of corpulent women. The bed-closet doors are often fastened on the inside, so that no interruption may happen them. The bed-closets—for they were nothing else in most cases—were universally of meagre dimensions, and generally badly lighted and worse ventilated. The bed occupied the best half of the apartment in most; a mattress of wool (once of feathers) reposed upon another of straw, or else a bag of chopped straw was superincumbent to loose wheat or other straw. The bedding was rather coarse, akin to our packing, and widely different from that given to paupers in other parts of the Continent. Coarseness, however, is subservient to cleanliness, but unfortunately the bedding often seemed anything but pure. The generality of the windows or apertures in these closets were barred with iron or wood stauncheons, which effectually prevented the exit of the patient, while there existed a bolt on the outside of the door rendering matters comparatively safe there. The beds were of wood, and like most of the houses in the country neither new nor inviting. The clothing of the female patients often hung about the apartment in all directions, and appeared rather dirty. The whole arrangements for the patient's lodging seemed apart from the others, and by no means mixed with that of the family, who occupied beds in other apartments. The housing of the patients at night is evidently a thing of security, not domesticity; and when the external air is excluded by the shutting of the window, the place must present an insufferably close atmosphere, by no means in consonance with *l'air libre*. In no case did I see two beds—for one of the family and a patient, or for two patients; all were separate. There is no doubt that the patient derives great benefit by mixing with the family during the day, but it must be remembered that all is not freedom, even at Gheel. Sometimes the sleeping apartments of the patients had to be scaled by clambering up a precipitous and ladder-like stair (even in the town), and were then found on a level with the lumber loft, &c. Frequently they were situated on a higher level than the ground floor in general use, and had to be reached by steps nailed to a slanting trap door, which led to a suspicious, cell-like apartment beneath, with a grating in the outer wall for light and ventilation. I asked my conductor if they never put their patients in these when excited; he said it would not be permitted. The apartment did not appear altogether designed for peats or sticks, for

neither soiled its whitewashed walls; in charity, however, we will suppose that it is not occasionally put to the above-mentioned use.

It is stated that, of the quiet patients, those engaging in agricultural labour, or otherwise suitable for the country, are sent thereto; but a man with anklets, who was wandering quietly about in the halting and shuffling way his bonds permitted him, showed that some were not thus selected. The guide feelingly pointed out that they were nicely padded, and did not seem to think them at all troublesome. The remarks on restraint made by Dr. J. Sibbald in his able article on Gheel, in the "*Journal of Mental Science*," April, 1861, p. 43, appear to me to be very apposite, and I shall not enlarge further on this point. Many of the patients, both male and female, were engaged cleaning potatoes, &c., with knives, and their clothing often seemed rather dirty. It does not contrast very much, however, with that of their *nourriciers*, since the latter are by no means remarkable for tidiness. The idiotic portion, with the exception of the children, had the dribbled breast and filthy appearance characteristic of the same class as they formerly appeared in the outlying portions of Scottish territory. The old male patients seem to have a predilection for nursing the children, and are sometimes to be met with them in their arms outside, or sit indoors rocking the cradles most carefully, reminding one forcibly of the pictures drawn by the describers of husband drudges. In the country some of the male patients lie at the roadside basking in the sun. One, a soldier of the line under the great Napoleon, and who had weathered the terrible Russian campaign but to pass the remnant of his days at Gheel, was peculiar in averring that he did not care much for this neighbourhood. He talked with glee of the French victories under his former chief, hated the Russians, but liked the English for their money and roast beef, commodities I dare say by no means abundant amongst the Gheeloise peasantry. Almost all expressed themselves quite pleased with Gheel, and seemed at home in the harvesting and other out-door occupations. In one house, I found the patient seated in a very small apartment, dimly lighted and closely shut, and in which I could scarcely stand upright; around him were piled heaps of small deals, having apertures cut in them. To pile, alter, and repile them, and to make a few coronets of twigs, was the sole occupation of this man. He never went out to walk; and, in fact, would not; his case was not the only one in which the free country air would be of little avail, except when it entered their huts. I passed a paralytic near the house of the "*Harmonie*," towards the west end of the town, who was busily engaged uprooting the grass from the side of a ditch, and he did so with great success; he rose afterwards, and commenced tearing the leaves from a hedge in front of the houses: no one took notice of him, and he took little heed of

me while sketching him and some houses in the neighbourhood, and I left him as keenly engaged at his work of destruction as ever. A little further on a gentleman accosted me in broken English, and asked if I would like to see his Swiss sketches; he was evidently a patient (*pensionnaire*), and the box which he turned out contained nothing but a perforated stand, and a little wooden cube.

The cottages of the Flemings keeping patients in the country are rather primitive, still retaining much of the characteristics mentioned by the distinguished Lunacy Commissioner, Dr. W. A. F. Browne, in his visit to Gheel, twenty-three years ago.* Each has its garden of ordinary vegetables, and its sunk well, over which stands a long weighted pole swinging on an upright beam. From the upper end of the oblique pole hangs a chain and hook; having suspended the bucket on the latter, the cottager pulls down the high end of the pole by the chain, thus letting the bucket descend into the water, when it is filled he has nothing to do but to let go the chain, and the bucket rises in virtue of the loaded extremity of the pole. A furious and powerful watch-dog welcomed you with bark and spring as you passed, and had not the chain been sufficient, many would not have belied their wolf-like aspect, as one or two loose ones we met clearly demonstrated. Attached to the cottages of those having land is the barn, which in many cases they were busily filling. We are accustomed in Britain to see the grain of farmer and cottager alike put into stacks, close to the homestead, but here it is otherwise; the small quantity of land held by each rendering the storing of it under a roof quite feasible. The carts are drawn sometimes by oxen, at others by horses. Attached to the house are the stable, byre, and other erections necessary in country life. At or near many of the houses you might see a stagnant pool, abounding in fine Algæ and interesting microscopic specimens of various kinds, *Dytisci* and Bull-frogs, while over it skimmed the gaudy *Libellulæ*, cutting their way through myriads of flies. The house itself is usually built of bricks, and the roof still remains "large, deep, and thatched." The interior was in keeping with the exterior quaintness. The door generally ushered you into the principal apartment, in which the fire occupied the ground between two spacious jambs, and over it I sometimes saw a large iron pot suspended by a novel arrangement. A wooden post with a pivot in the ceiling and another in the floor, gave out a powerful horizontal bar (crane fashion) about twelve or thirteen feet in length, from the extremity of which dangled the iron pot. The advantage of this primitive affair one housewife proceeded to illustrate; opening a narrow, horizontal deal flap in the opposite wall of the apartment, and also an ordinary door continuous with one end of this slit, she swung round the huge crane, the pot

* Vide 'Med. Critic and Psychol. Journal,' April 1861, p. 218.

at the extremity of which passed through the doorway, while the radius, as it were, entered the horizontal slit, thus permitting the pot to describe a segment of the circle in the other apartment or byre. In other houses, a small iron crane, with a nitched pendant of iron, supported the vessels. The extensive jambs gave refuge to many articles of culinary and domestic use, nor was it uncommon to see a chair or two in the same locality. Along the mantelpiece are ranged ordinary plates of crockery ware (an improvement on the pewter of 1838), and, indeed, the whole aspect of the place was quaint and original. Another apartment or two, one of which is the patient's bed-room, of no less primitive appearance, complete the edifice. In many of the peasants' houses around the town I saw another peculiar heating apparatus, doubtless resulting from the nature and scarcity of their fuel. It consists of a little cylindrical stove, which opens at both top and bottom; from the upper end a flattened horizontal tunnel proceeds, and this is the portion used for general cooking purposes. Wood, peats, and brushwood form the usual fuel. In the typical Flemish dwellings, the peats were symmetrically ranged in their large open fireplaces.

The inhabitants throughout are very kind and hospitable, and behave remarkably well to strangers; indeed, one is struck with the civility and politeness of these rustics.

As regards the hygiene of Gheel and its neighbourhood, the state of filth everywhere abundant, except, perhaps, in the central street, gives one no very exalted opinion. Assuredly in no British village, with half the interest attached to it, would such a state of things be permitted. Stinking ditches, collections of manure, putrid pools, &c., abounded in the outskirts and back dwellings of the town. I saw a good many cases of skin disease of the face and mouth in the young children playing about the roads, and this is not to be wondered at. From the before-mentioned report, we learn that during the four years—1856, 7, 8, and 9, smallpox, cholera, influenza, dysentery, and typhoid fever, have reigned epidemic at Gheel. In 1857, during the first quarter, smallpox occurred with virulence. The lunatics, however, were spared; only four had it, and those in a mild or varioloid form. During the third quarter of the same year, cholera occurred; many of the insane had it, but without any disagreeable result. In 1858, during the first quarter, a persistent and intractable influenza, complicated with grave affections of the organs of respiration, attacked both lunatics and inhabitants. During the third quarter of 1859, dangerous fevers, typhoid affections, and dysenteries, made great ravages in the neighbouring districts. Precautionary measures were taken at Gheel; attention was directed to cleanliness, hygiene, and diet; and, although many of the inhabitants of Gheel became victims of the epidemic, yet none of the insane succumbed. Of 257 deaths, which occurred in these four years,

107 were from cerebral affections; 70 from diseases of the chest; 30 from affections of the abdomen; 50 from other maladies. This gives a large proportion of brain diseases, even amongst a community of the insane. Of these, there were 27 cases of sanguineous congestion; 7 of serous congestion; 11 of ramollissement cérébral; 43 of general paralysis and ramollissement cérébral; and 19 of epileptiform convulsions.

Throughout, the patients seemed to have plenty of food. The bread for the paupers is dark rye bread, occasionally having a few currants; sometimes it is much darker than at others. For the better classes the bread is white. In one house, while getting a sight of the patient's bed room which happened to be darkened, the opening shutter disclosed a considerable number of loaves of very mouldy rye bread, which, if they were intended for the lunatic, showed a certain amount of carelessness. The moisture exhaled by the sleeper had caused the growth of the fungi.

The clothing of the pauper patients was little commendable, being frequently very dirty. It is stated that "most of the men wear, besides a complete habiliment, a blouse of blue linen, others a great coat; the females wear—some gowns, others jackets and cloaks of cotton." For shoes, most of the same class wear the sabots. Although it is affirmed that the clothing of the aliens much resembles that of their guardians, yet I could always distinguish the peasant women by their long brown cloaks and hoods (when they had them on), and by the greater prevalence of the quaint lace caps with their pendent sides amongst the older females.

The religious element, as before mentioned, is conspicuous at Gheel. Roman Catholic emblems, such as a full-sized figure of a turbaned knight slaying the devil as he issues from beneath the dress of a handsome lady engaged in her devotions, Saint Dymphna with the evil one in chains, pictures, small churches, here, there, and everywhere, form a very striking feature in this colony. In the country you see curious toy-like articles in glass boxes stuck on trees at the meeting of roads, &c., apparently as objects of veneration to the inhabitants. Almost all the insane are Roman Catholics; only twenty-one are Dissenters, Protestants, and Israelites. The lunatics attach a great value to the frequenting of religious exercises. More than 300 insane assist regularly, on Sundays and fête days, at Divine ordinances. A small number daily frequent the churches. The church of St. Dymphna, the patroness of the insane, is most resorted to by the patients.

Means for amusement are by no means so abundant. There are several billiard-rooms, one just at the entrance of the village, to which the patients have access. You also see some in the inns occasionally, but it is stated that they are not allowed to purchase an intoxicating amount of liquor.

La Maison des Femmes Aliénés, Ghent.—This edifice is situated not far from the centre of the town, near the Quai aux Violettes, and in proximity to a manufacturing house, which thunders forth a disagreeable din. Just as I was inquiring for the physician, M. Vermeulen, he entered, and with the greatest kindness and courtesy he showed me round the house. After seeing the surgery, which is a pattern for neatness and tidiness, and has an extensive supply of medicines, we entered a square airing court for the tranquil, overlooked by a balcony with workers, and having on the left (west) a row of tidy single apartments, which were allotted to the most deserving patients as a reward. There were flowers and trees in the centre of this airing court; the rest was paved. The rooms for the noisy patients were like those at Gheel in some respects. The barred, unglazed window opened into the corridor, and they had each a bed of the usual construction. In one or two instances leather wristlets lay on the beds. These apartments were dingy and uninviting, though there was nothing which offended the sense of smell.

For the dirty patients, the mattress was divided into three portions, and stuffed with straw. The central one readily lifted out, disclosing in some cases an India rubber portion, with a hole in the centre; in others, a sloped zinc bottom, with aperture and funnel. The elastic was convex when the bed was empty, but the weight of an occupant makes it hollow in the centre, thus forming a slope to the funnel, which opens into a metallic vessel beneath. Wool and straw, or wool partly mixed with horsehair, formed the contents of the two ordinary mattresses, and the bedding everywhere throughout the house appeared good; the bedsteads were of iron. The infirmary beds had in all cases white side-curtains; several phthisical, idiotic, and convalescent cases were the occupants. Carpets were frequent in the pauper dormitories and sleeping-rooms, and where these were absent, sand, arranged artistically, besprinkled the floors. Stands at the side of the beds were common, and one division, containing two shelves, was appropriated by the patient for sundries. In some cases the floors were of oak, in others of ordinary deal. The apartments were ventilated by apertures in the roof and walls, as well as by the stone gratings, which had communication with the external air.

In a large oblong apartment sat fifty or sixty females busily engaged in the manufacture of lace, happy and smiling. They plied their fingers most industriously, and the profits of such work must be considerable. Besides those congregated here, many others in the galleries and airing courts were sewing, knitting, or making lace. Pictures abounded in the large workroom, and throughout the house generally, chiefly, however, of a religious character. Statuettes, crosses, and Roman Catholic articles of many kinds, constantly met the eye. Near the work-room I saw one melancholic pouring in great tribulation over her prayer-book.

I witnessed the *déjeuner* of about eighty or ninety pauper females in a large oblong *réfectoire*, whose ceiling, like that of most other parts of the pauper division, seemed low. The plates and spoons were all arranged previously, and the tin drinking vessels filled with the sour beer of the country. The soup, which contained a great quantity of bread, was also ready in large jars, and the bread cut before the patients were admitted. Their plates were of metal, and very heavy. There was some little confusion, but not much, with so large a number of the insane.

The paralytics, when out of bed, were fastened for the most part in chairs, with a flat bar in front. In the idiotic and epileptic division were many very young children; one pretty little thing, subject to several epileptic fits daily, seemed a general favorite, and ran to every one, soliciting kisses. Some of the noisy and troublesome had on camisoles, and straps fastened with the triangular screw. In the school-room for these were numerous large, coloured diagrams on rollers, with hundreds of figures of beasts, birds, fishes, flowers and fruit, articles of furniture and decoration. Each of the patients is taught to repeat certain of these at sight. Besides these there were the ordinary articles in general use in the school-room, boards, desks, &c.

The kitchen for the paupers seemed very good; the lower part of its walls are composed of white glazed tiles, procurable from Amsterdam, Rotterdam, &c., at a moderate price. This is a feature worthy of notice, as placed at the back of boilers, &c., in fact, all round the place, it ensures perfect cleanliness with a trifling effort—a state of matters so desirable in a kitchen. The kettles and culinary vessels in general were of brass. In the laundry, and general store-room, the clothes were well arranged, but far from equalling the neatness of the same department at the Salpêtrière.

In the balconies, which were protected by a strong netting of elegant pattern, were many fine flowers in vases, and the females seemed to take great delight in working beside them.

The apartments for the private patients were next visited. In an airing court stood one large woman suffering from valvular disease, bound round the waist with a leathern strap, her wrists being attached to this on each side by a belt and screw. She was stated to be very violent. Several rather excited patients were loose at this time, and when I passed again through this airing court, one was fastened with straps to her chair. The court, though small, had nice plots of flowers, shrubs, and trees, with shady arbours. On the south side of this are situated the single rooms for the excited patients, containing the ordinary bed, a piece of carpeting, and with the barred, unglazed window opening into the corridor for observation. The day-rooms, saloons, parlours, and bedrooms of these and the higher class patients, were all of the best description, and were tastefully furnished

both with articles of use and luxury. Fine mahogany furniture, alabaster statuettes, and vases with flowers under glass shades, gave an air of elegance to the rooms. Mahogany washing-stands and accessories, white porcelain basins, rich bedsteads, curtains of various colours, looking-glasses, pictures, &c., made the bedrooms scarcely differ from those of a private house. In a spacious lobby stood a nice bookcase, filled with elegantly bound books. Picturesque scenes, viewed through an eye-piece, were mounted on stands for amusement. In the drawing-rooms and parlours are many large mirrors, glass and china ornaments, and paintings of the Flemish school—the religious element predominating. Some of the high-class windows looked into the streets, only protected by the green and red Venetian blinds on the exterior, and which readily pulled up, permitting a view of the street to the right and left. Reflectors, projecting from the windows, also showed the passers more minutely. The ladies had several newspapers, and illustrated periodicals of various kinds. Attached to the apartments for the highest classes is an elegant little chapel, most expensively fitted up and ornamented. Amusements and luxuries seemed to be well cared for in this part of the house. The kitchen belonging to the private apartments was in keeping with the other arrangements. The airing courts for these have large pictures, representing country scenery, waterfalls, &c. Some of them are situated at the back of little arbours of shrubs and trees, or have a canvas awning in front to shield the patients from the sun. In a court next the street, most of the walls were covered with these pleasant pictures of rural life, so that, even in this narrow space, the occupants might revel in the sight of waterfalls, mills, trees, shrubs, and flowers. A little fount, set on at will, was in the centre of one court.

The large general chapel had the usual structure. Separated from the further end is an apartment intended for the paupers, who get a glimpse of the priests or others officiating only through a dingy iron grating. This arrangement did not seem at all pleasing, and had the aspect of being suited for criminals, not ordinary lunatic patients. The official staff in this asylum is composed entirely of *sœurs*.

La Maison Sancte le Strop, Ghent.—This is situated at a distance from the town, by the side of the canal. It is built of brick, and at present large additions are being made to it. M. Vermeulen had the kindness to accompany me hither, and go round the premises with the superior. It is for male private patients only, and, as usual, the monks act as attendants; the latter wear tight, leathern cowls.

By the side of the porch is a range of new buildings, in an advanced state, consisting of porter's house, visiting-rooms, saloon, &c. The bedrooms throughout the asylum are for the most part excellent. The plainer apartments, however, appear somewhat small; having a wooden bed, which by folding thrice

form a chest-of-drawers appearance when shut. In the sleeping-rooms of the higher classes, which were in a separate establishment, a mahogany bedstead, chest of drawers, or wardrobe, neat basin-stand with toilet requisites, nice table, and altogether elegant furniture, rendered the apartments quite handsome. Religious pictures, crosses, looking-glasses, glass and china ornaments, exhibited a considerable taste for display. Attached to some of the larger rooms is a small one for a *frère*. Many of the beds had an apparatus for elevating the one end for ease and in the case of sickness. Those of wood had a music-stand or desk process of elevation, with a bar and niches. In the iron bedsteads the arrangement was much more complicated and expensive, in fact, the bed was raised by regular machinery. In turning down a bed to exhibit the structure of the zinc tunnel for the dirty, a set of leathern wristlets and straps came into view, much against the will of the superior, who looked anything but pleased at their appearance. There were no proper water-closets in the house, the substitutes being night-stools.

The day-rooms and parlours were also richly furnished, and most had a neat bookcase and books. Very fine views of the town, and surrounding country rendered the prospect from many of the windows attractive and cheerful. The railway to Bruges and Ostend passes on the other side of the canal, and affords variety to the inmates. In a saloon for amusement were several gentlemen at cards, one playing very nicely on the piano, and others amusing themselves at dominos. Adjoining this is a billiard-room and its occupants. Many of the patients reclined under a veranda, reading or smoking. This portion of the building, allotted to the highest class, is detached from the others, thus having greater privacy and quietude. The day-rooms are tastefully and expensively got up, and abound with pictures and ornaments. The dinner happened to be laid in one apartment. For this they had nice plates and dishes, knives of the ordinary kind and pretty sharp forks, spoons, large sharp-pointed carving knife and fork, and all the conveniences and elegancies of good society. The rests for the knives and forks were of blue glass, and the whole had a very pleasing look.

The stairs in most cases are of the ordinary character, and carpeted; the lowermost step in the best quarters being of black marble. There was a slight barrier to prevent jumping down the well of the stair in one case, but it was rather inefficient, and seemed more for ornament than use.

Their baths are of the usual form and construction (resembling those in the female asylum at Ghent, &c.), and are surrounded by bricks. Apparatus for *douche* and *arrosoir* is present. I was surprised to see a bed in one bath-room, but the doctor explained that this bath-room was for prolonged immersions in hot water, with cold to the head, and that the patient was sometimes kept in for five

or six hours, requiring thereafter the bed for recovery—a consideration by no means startling. These baths are composed of zinc; and where a lid was present, it was secured by pieces of flat iron rod, having the ends bent at a right angle, and tightened or loosened by being slipped on to a wider or narrower portion.

In the airing court for the *gâteux* there were several *camisoles* in use. There are idiot boys in the establishment, but I did not visit their apartments.

The garden seemed very fertile; ordinary vegetables and fine flowers flourished in luxuriance. Nice, shady trees characterised the airing courts. A very prominent and pleasing feature in the latter is the abundance of pet animals. Tame blackbirds hopped about the airing court of the *gâteux*; bird-cages, with linnets, canaries, thrushes, parrots, &c., abound in the rooms and outside in the veranda. In the arboreal and tasteful airing court of the best class of patients are fine aviaries of elegant construction. In these were silver pheasants, jays, turtle doves, quails, blackbirds, continental passerres, canaries, and a curious variety of the partridge, with a hooked beak. All these flourished in their respective apartments, or roosted under the common dome. A rockery and a small fountain decorated the interior of one of the aviaries.

Guislain's Asylum, Ghent.—This is a comparatively recent asylum, erected under the superintendence of the illustrious Belgian alienist. It is at a little distance from the city, at its north-west extremity, and is reached by a fine drive beneath an avenue of beautiful trees, which tower by the side of the canal from Ghent to Ostend; the building faces this, and has a good appearance, in spite of its bricks. It was built in 1852, for 150 male patients. The approach is quite bare, and a contrast to that in its neighbourhood. On entering the gate, you are in the convalescent and business court, having on the left the chambers of the medical officer and visiting-rooms; on the right, the bureau of the business department, director's room, kitchen, &c. In the saloon, adjoining the visiting-rooms, are a number of good oil paintings, left by Guislain as a legacy to the institution; in addition to these, he left other pictures, books, and many thousand francs. Passing on through the infirmaries, we first entered the airing court for the idiotic and epileptic boys, and I had an opportunity of seeing them at drill. A soldier is hired for this purpose, and he performs his task with zeal and energy. About sixty boys were ranged in a double row, and at the word of command went through various evolutions, bending or rather thrusting their arms upwards, horizontally, and downwards, whirling first the one, and then the other, stooping and raising their bodies in a manner calculated to bring many muscles of the back and thighs into action. Some were very young; others about fifteen or twenty. Two *frères* assisted at the proceeding; one exhorting the lazy and awkward, the other going

through the movements with the boys. It was an interesting sight, indeed, and they went through the movements exceedingly well, though the clouds of dust which swept through the hot airing court rendered it by no means an easy task to witness or undergo. In this court there was a swinging-boat, a few parched trees, and a dressing-house. In the school-room of these children, there were numerous large maps with figures of animals, &c., as in the female asylum in the same city. Alphabetical and arithmetic tables in multitude, harmonium and other musical apparatus, all had their respective places, and gave evidence alike of the wisdom of the physician and the advantages of the pupils. An attendant sat in the centre, binding some books. Writing-desks and forms occupied the rest of the apartment. For exercising the arm, shoulder, and back, there were long, weighted boards, with cross handles at each end. A pupil seized either extremity, and balanced the bar upwards and downwards.

The dormitories of the epileptic and idiotic children had generally three rows of small beds. Ventilation in these, as in the other apartments, was accomplished by apertures in the ceiling and central stove. A tumbler with a night-light is also set in an aperture in the wall, which is tunnelled from beneath, and has an outlet by a chimney above. The light is protected in front by glass. In the dormitories for the ordinary adults, a piece of carpeting lay between each bed. The bed frames are composed of iron; bedding not so deep as in Paris; mattresses of wool and straw, or the wool one was partly mixed with horse-hair—an arrangement, according to the interne, very commendable. The ordinary apartments and *réfectoires* were large and spacious, with high ceilings in all cases.

In the airing court for the *déments* and paralytic, some of the patients had long blue dresses, others with their arms in sac sleeves and lashed to their chairs, which had the bar in front. I did not see any with the ordinary *camisole*, though several were quite as securely fastened. In this airing court, the central grass plot was railed off with stakes, and in the enclosure were two fine white swans, and a piece of water six or seven feet long. Magpies hopped up and down on the trees, on appropriate sticks, and there were several other birds. Thus, although not permitted to have the use of the grass-plot, the patients had always fresh subjects of interest. A verandah at the north-west side afforded those in the chairs shelter from the sun. Under a porch, a *frère* and an assistant acted as barbers, and we came upon a number going to the baths, one or two with their arms tied. The interne averred these had “evil intents,” and avoided them. The baths are like those described at Gheel, and were the models from which the latter were constructed. The airing court for the tranquil (in the centre of the establishment) presents chicken, turkeys, pigeons, guinea-fowl, and other interesting pets.

This furnishing with living objects of natural history, was a marked feature throughout, and cannot be too highly commended. In Britain, it is often pitiful to see the deserted and bare look of the airing courts in some asylums, in which the patients have nothing to interest them beyond each other's sufferings. Noble trees, the growth of many years, are cut down because one or two climb thereon, or for fear of suicide; and few pet animals are encouraged; yet the same physician who thus shuts his eyes to the influence of nature may be a most strenuous advocate for more questionable forms of merely temporary interest and amusement, and scruple not to regard as 'narrow-minded' those of more moderate views. No benefit results to the insane by rendering the ordinary airing courts like those of a jail. The patients in the present case eagerly took advantage of their excellent courts, and seemed in general happy and contented. The grass-plot was neatly cut, and vigorous young trees made the place quite pleasing.

The airing court for the noisy and furious is in the form of a semicircle, with their apartments at either side; the baths occupy the centre of the curve. A colony of pigeons flourished unharmed in a pole dovecot, while plenty of flowers, shrubs, and trees, made the court one of the most lightsome in the premises. Posts, with transverse bars and projecting pins, formed part of the arrangements for manufacturing flaxen ropes; one patient turned a wheel, and others payed out the tow. In the outer wall are many grated apertures through which the patients may view the surrounding country, and watch their quieter neighbours bringing in the grain and stacking it.

The dining-rooms are large and well ventilated. They use principally metal dishes, with spoons and forks, but no knives. This is not on account of the danger of the knives, at least the interne said so.

Several of the apartments were only occupied by empty bedsteads. Throughout the house the latter were entirely of iron, except for the *gâteaux*, and where a wooden board formed the guard at the head and foot. The *gâteaux* had wooden bedsteads and straw mattresses in three divisions, with the usual zinc slope and tunnel beneath the central portion. The single chambers for the turbulent had an aperture about two feet long, on a level with the floor, for washing out the apartment, and certainly there was no urinous odour. The windows need not be again described, as they formed the pattern for those at Gheel. The general clothes' store was very well kept, and a large quantity of the new materials, towels, strong dresses, and sheets, was the product of native industry. In the workshops several carpenters, eight or ten weavers, and one or two wool-pickers, were busily employed. There is no night attendant on the tranquil, but in the infirmaries, and

amongst the dirty there are watches. There did not appear to be any other watercloset than open privies near the farm, at least I did not observe them. The lavatories are excellent. The religious element occasionally appeared, but not so much as usual. The chapel is spacious and of the ordinary description, and a *frère* sat wrapt in his devotions. There was nothing like asylum uniform in the clothing of the patients; on the contrary, variety was the rule.

Attached to the asylum is a kitchen garden, and a small farm. Many of the patients were engaged with the *frères* conveying the grain into the farm-yard. A brother went at the harrows with a pair of excellent horses in the immediate neighbourhood. The farm-buildings are good, with separate compartments for hens, turkeys, sow and pigs, &c. The byre was occupied by eight or ten fine cows; and the usual furnishings of a farm were abundant. Next the farm buildings is an airing court for the unruly boys, flanked by a row of privies.

This asylum certainly reflects great credit on its distinguished originator, who brought the experience of a lifetime spent amongst the insane, to bear on its construction.

The Institution of M. Masse, at Bruges.—The limited time at my disposal, rendered my visit to this asylum very hurried, so that I have few notes to detail. It stands near the south-eastern barrier, and has existed about 200 years; additions and alterations being made according to the exigencies of the times. It is a retreat for rich and poor of both sexes. The pauper airing courts are rather confined, but their inmates seemed cheerful and happy, and they clustered round the father to have some sweetmeats. Those for the private patients are large, and have nice arbours. The internal arrangements were much the same as in the Ghent asylums, only the ceilings were much lower, and the apartments smaller. The dormitory beds for the paupers had side curtains. The kitchen presented everything in excellent order, and they had a good bread-slicing machine. The white porcelain tiles were again favorably spoken of. A nice separate chapel appears to be insufficient, so that a new one is contemplated. The farm buildings are good, though untidy, and they possess twenty cows and four horses. Convalescent and recovered patients were engaged mending carts and officiating as general carpenters.

The *camisole de force*, wristlets, and anklets, were in pretty general use, and the superior advocated their employment most eloquently. A library and periodicals furnish amusement for those who care. To the higher class patients drives into the country are occasionally given, and to the others walks. There are billiards, cards, &c. Beyond the barrier they have a farm of sixty acres, but little ground in the immediate neighbourhood of the asylum. The attendants are *frères* and *sœurs*.

On the Pathological Anatomy of the Brain in Insanity.

By ADAM ADDISON.

The Essay to which was awarded the Prize offered by several Superintendents of Asylums—formerly Assistant-Physicians in the Royal Edinburgh Asylum—to the Students of Dr. Skae's Class, Session 1861.

“Man is not born to solve the problems of the universe, but to find out where the problem begins, and then to restrain himself within the limits of the comprehensible.”—GÖETHE.

THE great progress which medicine in general has made during recent years, must in considerable part be ascribed to the anatomical direction it has assumed. The study of pathological anatomy has entirely changed the character of medical science, which, instead of a chaotic medley of unfounded theories and ingenious hypotheses, the fruits of speculation, is now a philosophic system resting on a firm foundation of facts with mutual and definite relations. To such an extent has the pathological investigation of disease been carried, that, in the ordinary maladies which attack the body, the instances are now exceptional where we cannot demonstrate certain gross, palpable changes of structure having an invariable causal connection with functional disturbance. By bringing diagnostics to our aid, we can also in many cases predict with confidence and precision the nature and extent of the lesion which will be found after death. But the triumph does not cease here. In conjunction with chemistry and the microscope, pathological anatomy has passed from the gross alterations of organs, and succeeded in elucidating the processes and changes which take place in their ultimate elements; and Virchow, bringing to the subject all the zeal and instinct of genius, has given us an insight into the arcana of cell-life, and laid down the comprehensive generalisation as the basis of a new pathology, that the cell is the ultimate agent by which, both in health and disease, structural and functional alterations are effected. All the practical departments of the healing art have participated more or less in this progress. Medicine proper, or that branch which restricts itself to the study of internal diseases, has separated itself more and more from dynamics, and found a natural explanation of its symptomatology in anterior changes of structure; while surgery and midwifery, with their outbranching specialities, are daily becoming more anatomical in character.

But whilst we are congratulating ourselves on the present promise of medical science as a whole, there is one very important element of it which, pathologically, at least, forms an exception to the general state of progress, namely, insanity. This department may still be considered the "terra incognita" of pathology, the land of adventure to the future investigator, which allures with the prospect of brilliant discoveries, and the solution of problems hitherto insoluble. In common with its sister branches, the investigation of the pathology of insanity took an anatomical direction; and, judging from the magnificent results which were achieved in the former, it was quite natural to expect that the key to the different forms and symptoms of mental disease would be found in alterations of the cerebral tissue. With the minute study of the membranes of the brain, it appeared as if a new epoch had commenced for the whole pathology of insanity, and it had therewith acquired a kind of rational, somatic basis. And, indeed, it may be said without exaggeration, that the theory of Bayle, and all which followed it in the literature of medical psychology, was the most decided step by which it joined itself to the general movement of medical science. But, unhappily, notwithstanding the plenitude and the apparent significance of the anatomical phenomena which the labours of the most distinguished alienists in all countries have brought to light, the expectation of a rational somatic pathology has not as yet been realised, and pathologists have failed to bring out of the facts at their hand other than a contradictory or negative result. When we come to compare and to bring them into connection with the symptoms of mental disease—for a true pathology cannot stop short with the mere registration of anatomical details, we enter upon a field of doubt and conjecture, without any guiding light or beaten path, surrounded on every side by the dangers of error; and though all the teachings of physiology, all the past history of pathological anatomy in its connection with etiology, confidently assure us that this is the only direction by which we can reach the goal of a scientific pathology, yet the confusion is so great, and the difficulty of evolving order out of the chaos so immense, as to make this labour at once the most complicated problem and the highest effort that have ever engaged the attention of the metaphysician and the physiologist.

The causes that have led to this disproportionate progress of medical psychology as compared with the other branches of medicine, lie mainly in the subject itself. In by far the greater number of cases, death occurs many years after the commencement of insanity, which it is not uncommon to find extending over periods little short of a lifetime. Meanwhile, the symptoms both in the nervous system and in other parts of the body have been undergoing a variety of alterations. Some which at first were strongly pronounced have become milder in character or

have altogether disappeared, while others of an entirely different kind have been ushered in. Thus, various diseases have arisen, pursued their course, and left their effects upon the cerebral substance. When at length death removes the unhappy sufferer from the stage, a number of important changes are found to have taken place in the brain, but it is generally impossible to trace back the history of these abnormalities, to fix the date of their origin, and to establish a relation between them and the symptomatological phases through which the disease has passed. It is true that in a considerable number of cases we have an opportunity of examining the brain shortly after the outbreak of insanity, when it is still at its height, as in cases of acute mania which have rapidly succumbed to exhaustion or accidental diseases. Here it might naturally be expected that we should find structural changes sufficient to account both for the immediate cause of death and the more remote cause of the mental disturbance, but the deviations we do meet with are often such as occur in diseases which leave the integrity of the mental functions untouched. As Dr. Flemming very aptly observes, "we are in the same position, in which one would find himself without a guide upon the field of a recently fought battle—given over to a feeling of melancholy wonderment at the carnage and devastation which give evidence of the violence of the struggle, but not of the operations whose theatre he surveys."

An equally important cause of the unsatisfactory state of the pathology of insanity lies in our imperfect knowledge of the minute anatomy of the nervous system. Of all organs, the brain is least known, either anatomically or physiologically, and, consequently, the medical psychologist cannot be expected to detect slight deviations from a normal standard he does not possess. Hence has arisen the assertion that very often not the slightest irregularity is to be found in the brains of persons dying insane. Upon this point, however, the best authorities seem agreed, that such statements are only a proof either of the peculiarity of the ideas entertained as to what anomalies are essential for the production of insanity or of the incompleteness of the anatomical examination, and that a careful necropsy, were we in a position to make it, could always detect sufficiently important deviations from the normal state. In connection with this point, it ought to be taken into account that the brain and nervous system are under very different conditions from those of other parts of the body. In the latter all vital manifestations occur only as material alterations, visible and palpable; hence even the slightest deviations are manifested in a material product. But in the former they are immaterial, in so far as the product of their activity is neither material nor visible, but only thought, sensation, and volition; and, in accordance with the same law, disease less frequently gives rise to a material product in

the nerve-cells. The reason of this we find explained in the following passage from Virchow's 'Cellular Pathology.' He observes, "That in all those tissues which are subject to important functions, we find those functions are chiefly due to very delicate changes of arrangement or, if you wish it expressed in more precise terms, to minute changes of place in the minute particles of the internal matter, the cell contents. In these cases, therefore, it is not so much the real cell in its pure form that decides the question, as the specific matters with which it is provided internally—the chief agent is not so much the membrane or the nucleus of the cell as the contents."

"It is these which, when exposed to certain influences, become comparatively rapidly changed without our being always able morphologically to detect any trace in the arrangement of the contained particles. We cannot perceive any definite chemical change, or any alteration in the nutrition of the parts; we only see a displacement or dislocation of the particles, which, however, probably depends on some slight chemical change in the molecules composing them." It will at once suggest itself that these conditions are competent to explain the failure of pathological histologists in detecting any remarkable changes in the nervous tissue in mental diseases, while, at the same time, it may be used as an answer to those who deny the somatic origin of insanity in the absence of appreciable microscopical alterations.

The complexity of the subject is still more increased by the fact that the brain in the pathological conditions of its parts preserves a character of almost undivisible unity, so that structural alterations of different kinds are associated with similar functional disturbances, while on the other hand dissimilar deviations of function accompany similar organic lesions. Thus in mania, melancholia, and dementia, any psychological consistence between the symptoms and the post-mortem appearances cannot be established. Nor, indeed, in a clinical point of view, are these forms separated from each other by any sharp line of demarcation. The same thing holds good in general paralysis, which clinically occupies a much more favorable position than the others. It is now generally believed that this is a distinct disease, whose symptoms, course, and prognosis, can be predicated with confidence. Indeed, it was the discovery that general paralysis of the insane is constantly associated with anatomical alterations of the cerebral tissue which first led to the opinion that organic lesions are really the essential causes of all mental disorders, and it was hoped that by starting with it as the first step of a classification, all diseases of the mind might acquire the much-desired somatic foundation. But even as regards general paralysis, in which the anatomical lesions are so striking, the difficulties which stand in the way of the realisation of so beautiful a scheme are far from incon-

siderable. For it cannot be concealed that not only are the pathological appearances inconstant in undoubted cases of this disease, but that the same alterations are found in the most exquisite degree in other forms of insanity. A most convincing proof of this occurred last summer in the Edinburgh Royal Asylum. In the case of a boy of twelve years, afflicted with epileptic dementia, a most exquisite example of a general paralytic's brain was observed. It presented all those appearances which have been exclusively associated with the "delire ambitieux," the white, fleshy, thickened, and gelatinous arachnoid, with adhesion of the pia mater to the cortical substance and an extreme and general atrophy of the convolutions. But in this case it need scarcely be stated that there were no symptoms of paralysis or monomania of grandeur. This and observations of a similar nature are sufficient to show that, pathologically at least, general paralysis does not present any anatomical features by which it can be distinguished from other forms of insanity. The foregoing facts obviously preclude anything like an attempt to describe the pathological phenomena of psychical diseases in "tout ensemble" groups, labelled with the names of special forms; for that would be a mere arbitrary classification which has no existence in nature. The most convenient and natural plan will therefore be to inquire—1st. What pathological alterations are found in the brain of persons dying insane? 2nd. What relation do these individually have to the mental symptoms, and to the whole disease?

The following is a brief summary of the structural alterations which have been described as most frequently met with in the brains of the insane. They are: adhesions and thickenings of the cranial bones; Pacchionian granulations; osseous projections and deposits in the meninges; thickenings and opacities of the arachnoid, with serous effusions into the meningeal spaces; similar collections in the ventricles of the brain; partial or extensive hyperæmia of the brain and its membranes; unequal consistence of the cerebral substance; vascular dilatations and varicosities; papillary excrescences on the pia mater; discolorations of the cortical substance to ash and yellow gray, of the medullary to gray and yellowish white; softening of the medullary matter, sometimes to a diffuent mass; so-called apoplectic cysts in different stages of metamorphosis; increased specific gravity of the brain substance; general and partial atrophy; destruction of the brain by suppuration; ossification of the arteries, tumours, &c., &c.

Of all these abnormalities those which relate to the vascular system are entitled to the first place. They are included within the extremes of hyperæmia and anæmia.

Congestion is perhaps the most difficult point in the whole pathology of insanity. For a long time it has been the custom to ascribe a great rôle to it in the causation of mental disorder; and,

although adverse opinions have not been wanting, the theory that it is a factor in the production of psychical disease appears not without foundation. It is only expressing an every-day experience to say that this condition is a frequent post-mortem appearance in autopsies of the insane; and it is impossible to turn over many pages of asylum registers, or consult any book upon the pathology of insanity, without finding minute descriptions of congestionary phenomena. Sometimes it is in the dura mater, which presents a diffused blush, and its surface is covered with varicose vessels and dotted over with multitudes of red points, the result of capillary rupture. In this condition it is sometimes found to be thicker than usual, parchment-like, discoloured, and adherent to the cranium or the arachnoid. At other times congestion appears more pronounced in the arachnoid, which presents large masses of dilated veins; Guislain describes it as having the aspect of an inflamed conjunctiva. More frequently, however, the hyperæmia of this membrane is found after death to have been apparently expended in the production of the milky-coloured spots and the opaque, thickened parts with the serous infiltration between it and the pia mater, so often met with under such conditions. The pia mater is very frequently thickened, and easily separable from the brain substance, particularly when it has a tough, leathery character; but in general paralysis it is almost regularly so adherent to the cerebral matter, that portions of the latter are carried away on attempting to strip it off. Its vessels are seen to be enlarged, varicos, and gorged with blood. In intense congestion the brain substance presents a pinkish or violaceous hue, and on incision is found to be beset with a multitude of small red points, the *puncta vasculosa*; it also feels remarkably doughy to the touch. In the majority of cases, however, these appearances are not to be observed in so great intensity. Of thirty-four cases of acute mania, taken from the pathological register of the Edinburgh Royal Asylum, fourteen showed a well-marked congestion of the pia mater, with a pinkish or violaceous hue of the brain substance; in the remainder the hyperæmia appeared more limited and partial, prominent at some points, and at others passing into absolute absence of vascularity. In two or three instances the only appreciable changes were slight thickening and opacity of the arachnoid, which may be regarded as the products of an extinct hyperæmia. Indeed, unless the brain is examined at the very acmé of the congestion, it will often be found that the over-supply of blood has been expended upon the altered tissue and the exudation, while there is some reason to believe that nothing disappears sooner than congestion; so that the absence of injection is no proof of its not having been present before death. The hyperæmia may be either active or passive, but in most cases the colour communicated to the tissues is not sufficiently characteristic to admit of the distinction of the one from the other. It is only in

very intense congestion with a general injection of the vessels that these two conditions can be distinctly determined—the active by the deep reddening of the cerebral tissue, and the passive by the engorgement of the veins. This question is therefore in some respects without the pale of pathological anatomy, and must be answered indirectly by conclusions based upon the symptoms observed in the living. The predominant character of passive congestion is depression, with a general diminution of functional activity; the senses react slowly and weakly, and the flow of ideas is torpid; the patient comprehends with difficulty what is said to him; his answers follow slowly, apparently unwillingly, and with the expression of indifference. These symptoms perfectly correspond in their character to those which are observed in passive congestions of other organs, namely, a general depression of function. In active hyperæmia, on the other hand, we find an opposite state of matters. Exaltation is here the characteristic feature. It is attended by extraordinary restlessness and movability; all the functions of the brain are exaggerated, the susceptibility of the senses increased, the formation of the ideas and fancies quickened. But the condition of the brain of the insane is distinguished from that of the sane not merely by increased activity, such as a quicker and more lively play of imagination and thought, but rather by its depraved and perverted action. The more hasty does the latter become, the less does it attain completeness. The sensations follow so quickly that the attention cannot control them; an idea is scarcely generated before it is obscured by another; a thought is not cogitated before it is carried away by a train of others equally fleeting. In general the symptoms of exaltation are combined with those of depression. The reason of this is easily seen when we consider the condition of the vessels demonstrated by the microscopical observations of Schroeder Van der Kolk, Ekker, and Elbers. These writers have published observations to the effect that, in certain forms of mental disorder, particularly mania and the “*delire ambitieux*,” the capillary vessels are found dilated and varicose. Some vessels under the microscope appear to be enlarged, while others are considerably contracted, or retain their normal calibre. Some are dilated to three or four times their usual size. When this condition becomes chronic, venous dilatations, varicosities, are developed in the gray matter. Hence it is evident that neither the effect of the irritation nor the stasis of the blood are uniformly spread over the whole organ. In some parts of the organ active assimilation of the blood with increased function will be going on, while in others the stasis has already put an end to it and given rise to depression. Owing to the structural peculiarities of the brain, these conditions may disappear in one part and be transferred to another—a fact which explains the great alternations in the symptoms of cerebral congestions. Thus exaggerated

action predominates and intermits, sometimes here and sometimes there, in organs of quite heterogeneous function ; now it shows itself in an over-activity of certain senses, then in the domain of the ideas, and again in uncontrollable action of the will.

The relation of congestion to insanity has been made the subject of lively discussion, in which it has been argued that nothing is more deceptive than the assumption that a hyperæmic condition of the brain can give rise to mental disorder. Some, like Engel, have gone so far as to deny the possibility of deciding whether congestion of any organ, and especially of the brain, originates before, during, or after death. Those who incline to metaphysical theories assert, that it may be the consequence of insanity, as seen occurring in so many mental emotions within the bounds of health, or it may be what Virchow calls a collateral phenomenon, that is, the noxious influence affecting the brain may at the same time disturb its function and its vascular condition, and that in all cases it is impossible to say whether the injection of the vessels is not produced after the commencement of the disease by the vociferations and violent behaviour of the patient, or during the paroxysm of death. It is added, that the frequent occurrence of congestions and obstructions of the cerebral vessels, as in diseases of the heart and lungs, without any disturbance of the mind, prove that these conditions are not merely possible, but in most cases the actual ones.

Taking our stand on broad, physiological principles, it may legitimately be concluded that a case is made out for a causal relation between congestion and insanity in the perfect correspondence of the symptoms during life, and the post-mortem appearances with the phenomena which we can experimentally produce in organs accessible to objective perception. To those who make the objection that congestions of the brain occur without giving rise to mental symptoms, it may be answered that, when such do arise, they are merely mechanical conditions, and that it is not asserted that the pure, naked over-supply of blood constitutes the whole process of insanity. Physiologically and pathologically, congestion is not the only thing required that an increase should take place in the nutrition of a part ; besides the increased quantity of blood, it is necessary that "particular conditions should obtain in the tissues (irritation), altering the nature of their attraction for the constituents of the blood, or that particular matters should be present in the blood (specific substances) upon which definite parts of the tissue are able to exert a particular attraction" (Virchow). It is quite consonant with our present physiological notions and our knowledge of insanity to believe that some ultimate "irritability," constitutional or acquired, resides in the nervous tissue of the insane, which, on the addition of another link, rapidly developes into disease of the mind. These two are necessary and essential links of the same process,

mutually dependent. Thus the narcotic poisons, when brought into direct contact with the nervous tissue without the intervention of the circulation, exert no narcotic effect. This experiment, though it leaves undecided whether the process of narcotism commences first in the nerve fibres or in the vessels, appears to prove that the medium of the circulation is necessary for the action of these matters. It is highly probable that the first step in the process of insanity is an irritable state of the nerve-cells, but it is just here the "problem begins;" and as Dr. Bucknill has stated, and the foregoing experiment confirms it, the connection between cellular and vascular change is of so intimate a character, that it is difficult to assent to the proposition that pathological conditions of the cerebral vessels are to be viewed as secondary phenomena. The positive philosophy of the nineteenth century has set its ban upon all attempts to discover ultimate causes, and we shall do well to "restrain ourselves within the comprehensible," which in this case is congestion. The occurrence of *Anæmia* of the brain in the insane has been proved by post-mortem examinations, as well as by observations made on the living. In the dead body this condition is indicated by a very pale cortical substance, extremely few vessels on the upper surface, and still fewer in the medullary matter. In the brains of aged persons the deficiency of blood is recognisable on making a section, in the wide, open mouths of the empty vessels throughout the brain substance generally; in the bodies of younger individuals, the vessels are often contracted in some parts and dilated in others. The perverted action of the brain often takes the form of dementia, or dementia with excitement, and in slighter degrees a melancholic direction. *Anæmia*, as a temporary condition, is sometimes associated with a temporary melancholy in lying-in women. But it is rare to meet with a pure and general anæmia of the whole brain. Thus we often find that while the large, external vessels of the cerebral surface are bloodless, those in the interior of the medullary substance are gorged to their ultimate ramifications; the medulla oblongata is often covered with over-filled capillaries, while the optic thalamus and the corpus striatum present not the slightest vascularity. It was long a puzzle to pathologists why, in states of general anæmia, the symptoms during life should be those of active congestion, namely, exaltation and increased function, and the brain after death should be found with all the characters of anæmia. This difficulty has been solved by the discovery of a condition which Virchow terms *ischæmia*, or partial anæmia combined with hyperæmia. It is due to contraction of the veins, the capillaries, or the arteries. When the vessels become contracted, from whatever cause, it is obvious that the course of the blood will be interrupted—that a stasis will take place; consequently, below the contracted part the brain is deprived of its supply, while above it the blood

accumulates in extra quantity, and, being obliged to distribute itself in the lateral vessels, on the principle of compensation, gives rise to an over-fulness of the adjacent parts. Virchow also points out that this condition of the vessels is also generally combined with a venous hyperæmia, which he regards as the contra-distinguishing sign from states of simple anæmia. These observations are particularly valuable, because they explain why conditions of anæmia and hyperæmia respectively are accompanied by symptoms so exactly similar that they cannot be distinguished from each other. They are of an indefinite and mixed character. States of depression and exaltation alternate and intermingle with each other. The latter are said generally to predominate, but are often accompanied by a peculiar expression of deep and painful suffering.

Equally interesting and important, as bearing upon the causation of insanity, are the causes to which Virchow ascribes ischæmia. It may originate from mechanical obstructions, thrombosis, &c., and also from dynamic conditions, of which the most frequent is probably spasm of the vessels, when their calibre is diminished by contraction of the muscles.

Among others still more applicable to mental diseases, we find narcotics (alcohol, opium, &c.), asphyxia, paralysis, hyperæsthesia (including over-irritation, in consequence of mental strains) cold, electricity, and mental emotions with a depressive effect.

It has been a disputed point whether the narcotic poisons give rise to perversion of the mental functions by altering the conditions of the circulation of the brain through irritation of the nerve fibres or the vascular walls, or by the introduction of a poison injurious to nutrition, or at least by some power peculiar to themselves of decomposing the blood. Virchow having in view some experiments of Schroeder Van der Kolk and Ekker, appears to look upon these poisonous effects as due to an ischæmic condition of the brain produced by their administration; although he is doubtful whether the ischæmia is to be regarded as an effect of the agony, caused by the long contraction of the muscles of the vessels—or whether it preceded the death struggle. It has already been shown that in all probability the medium of the circulation is necessary to ensure the action of the narcotics, and it is no violent assumption to conclude that some of their symptoms are caused by a condition of ischæmia. It is equally probable that the poisons engendered in the living body, as the rheumatic, the gouty and puerperal conditions of the blood, may act in much the same manner, and should be placed on the same category as the narcotics. Mental emotions, too, besides their spasmodic effect upon the quantitative relations of the circulation in the brain, are perfectly calculated, from their known propensity to derange the secretions and excretions and alter the quality of the blood, to give rise to conditions of ischæmia by irritation. Of course in all these cases we are still obliged to

assume a special and specific irritability of the nervous tissue, shrouded in the mystery of ultimate causes and individual idiosyncrasy.

Anæmia is also met with as a secondary condition, the result of induration, which exercises a pressure upon the vessels ramifying through the indurated part. It generally originates from the hypertrophic induration consequent on injury. It is associated with sleeplessness, perverted mental action, and a morose, melancholy humour.

The next point for our consideration is that of hæmorrhage. Effusion of blood into the sac of the arachnoid is not a very unrare occurrence. Hæmorrhagic extravasations into the deeper parts of the brain are occasionally met with in monomania. In one case of monomania of unseen agency, the right optic thalamus contained a cavity, about the size of a hazel nut; while, on the left side, a recent hæmorrhage—the immediate cause of death—had torn up the corpus striatum and optic thalamus, the clot being separated from the ventricle by a thin layer of cerebral substance, which had given way at one point, the external wall of the sac being formed by the cortical substance only. In general paralysis, the corpora striata and optic thalami are sometimes found puckered, this being due to a loss of substance resulting from contraction of apoplectic cysts; section of the organs reveals numerous small cavities, surrounded by yellow softening.

What relation, then, do these hæmorrhages bear to the mental disease? At first sight, these appearances appear to be among the brightest triumphs of pathological anatomy in insanity. Effusion of blood, pressure and irritation of the brain—what more is required for the explanation of mental derangement? On a nearer view, however, important doubts are suggested as to this connection. First of all it is essential to determine the time at which the extravasation took place. When a fresh, moderately-sized clot is found after long duration of the disease, it is obvious that the latter cannot be due to the hæmorrhage. It is more difficult to form an opinion when only the remains of the extravasation are found, namely, false membranes, and when apoplectic symptoms have occurred before the patient has been placed under medical observation. In some cases of this kind, it certainly appears as if the apoplectic symptoms had given the first impetus to the insanity, and as if it had dated from them. To the cases given by Bayle, it may be well to add the two following, from the 'Report' of the Edinburgh Royal Asylum, for 1855.

History.—A. B—, a reader for the press, of sober and industrious habits, fell into general bad health from over-attention to business. About a year previous to admission into the asylum, he lost his speech and the power of his left side, for the space of a quarter of an hour. Previous to this no mental derangement was observed. After the first seizure, similar attacks occurred about every three weeks, but

gradually diminished in their duration; and, at the time of admission, they only lasted two or three minutes. His memory became gradually impaired, his speech faltered and his gait was affected. The delusions so characteristic of general paralysis took possession of his mind about four months before coming to the asylum. During his residence in the asylum he became gradually fatuous, and general paralysis became more complete. He died after having been in the house seven months. During the last four days of his life he lay in a semi-comatose state, with the flexor muscles of his hands and arms permanently contracted, and his jaws firmly locked. On examination after death, a thick false membrane was found beneath the dura mater on the left side; it completely covered the hemisphere, with the exception of the base. The membrane was nearly twice the thickness of the dura mater, of firm consistence, and apparently well organised; over its surface there were many dark patches, which appeared to be old clots of blood. A false membrane was also found on the right side; but it was thin and delicate, and was limited to the upper surface of the hemisphere. There were about two ounces of fluid beneath the arachnoid, and one ounce in the lateral ventricles. There was also a granular condition of the lining membrane of the ventricles. The nervous substance of the brain did not present any abnormal appearance.

Remarks.—The points of interest in this case are—How was this false membrane formed? and, When was it formed? In answer to the first of these questions, there can be little doubt that it was the result of extravasation of blood. At first sight, it may appear more uncertain when this hæmorrhage took place. It will be observed, that the first apoplectic seizure was of short duration, and that the hemiplegic symptoms were only of temporary duration. We know that a similar lesion is not unfrequent in new-born children, as a result of pressure on the head. In those cases the paralytic symptoms are also temporary. The fact is explained by the pressure being uniformly spread over the surface of the brain, and not confined to one point, as in hæmorrhage into the brain itself.

A similar lesion was noticed in the Appendix to last year's Report.

History.—J. S—, was a tailor, of sober and industrious habits. Ten years previous to admission he had a seizure somewhat like an apoplectic fit. Soon after this he was obliged to give up work, on account of impairment of vision. His friends observed, also, that his temper was much altered from this date; he became irritable and discontented. About a month previous to admission he had another seizure, after which his mind was greatly affected; he displayed the characteristic symptoms of exaltation, and was violent and abusive to his family. During his residence in the asylum, he had many congestive attacks. He became generally paralysed, and was completely amaurotic.

A year after admission, or eleven after the invasion of the malady, he died in a condition similar to that of the last case.

Post-mortem.—A false membrane was found to extend over the entire superior aspect of the cerebrum. The arachnoid had a granular appearance. There was very little fluid in the sac, pia mater, or ventricles. The spinal canal contained about five ounces of fluid. The spinal cord appeared unusually soft; and about the middle of the dorsal region, there was a portion of the nervous matter of a yellowish red colour, and softer even than the rest of the cord. In this, as in the former case, there was no apoplectic seizure, or well-marked paralytic symptoms, to indicate the existence of any extensive hæmorrhage; the reason is undoubtedly the same—its occurring in the sac of the arachnoid, and spreading over the entire surface of the cerebrum.

Similar appearances, preceded by similar symptoms, were also found in another case of general paralysis during the past winter. Between the dura mater and the pia mater a membranous layer was found, of a brownish yellow colour, nearly a quarter of an inch thick at some parts. It covered the whole of the cerebrum, but was not so thick towards the base of the brain. It was comparatively free from both dura and pia mater. In the middle fossa of the brain, on the left side, there was a similar layer of organised lymph thrown out upon the external side of the dura mater, between it and the bone. The pia mater and arachnoid were thickened, and adhered firmly to the gray matter; the thickening had a milky appearance. The gray matter was pale, and divided into two layers by a well-marked line, and softened, but not to such an extent as to be washed away by water.

As opposed to the significance of these facts, it is asked, how comes it that so many hæmorrhages into the substance of the brain, as well as between the membranes, are not followed by insanity? Here we are again obliged to have recourse to a special irritability or disposition to insanity. Indeed, nothing is more common than to find individuals who have an hereditary tendency to disorders of the mind suddenly becoming insane after a slight attack of apoplexy. On the whole, however, it is the general rule that cranial hæmorrhages in the insane occur first in the course, and not before the commencement of the malady, which has a disposition to hæmorrhage among its consequences. It is not improbable that the convulsions and spasms so often occurring in the course of mental diseases are oftener the cause than the consequence of hæmorrhage. In general paralysis especially, the vessels are atheromatous and fatty, and will easily burst when the strain upon them is very intense. Common epilepsy often terminates in cranial hæmorrhage.

Inflammation.—Acute inflammation of the brain, resulting in suppuration, red and yellow softening is very rarely met with in the

insane, and when it does occur, it bears much the same relation to insanity as hæmorrhage; but the so-called subacute inflammations of the membrane are much more frequent pathological phenomena, and have given rise to considerable discussion. These conditions, however, never go beyond irritation and hyperæmia, whose products are circumscribed induration, opacity, thickening, and adhesion of the membranes. When the disease proceeds from inflammation of the meninges, it is communicated from the pia mater to the gray substance, which at the acme of the inflammatory process is softened, but, as it subsides, becomes indurated and adherent to the investing membrane, so that the latter cannot be removed without bringing away pieces of the adhering brain substance. Another condition of the brain, which results from these inflammatory attacks, and permanently remains, is a varicose dilatation of the vessels. This state of the vessels is thought to cause atrophy of the parts of the brain substance in which they ramify. These appearances, in a slighter degree, are tolerably common in cases of acute mania; but as they are also found in the brains of the sane, and little or no importance is ascribed to them, they may be regarded as possessing no value in this form. In general paralysis, however, in which they are met with in most exquisite examples, they have been regarded as very important anatomical facts, and have given rise to several theories, of which that of Bayle has, perhaps, been most widely prevalent. This pathologist states that, in his opinion, general paralysis of the insane is the result of a primary chronic meningitis, very often combined with consecutive inflammation of the cortical substance of the cerebral convolutions. It is not due to a general induration of the brain, as was asserted by Delaze, since this condition is found in scarcely one-fifth of the cases; it is not the consequence of a premature encephalitis (Calmeil), and, finally, it is not the result of inflammation of the gray substance. The paralysis and delirium of the first period, or the period of the monomania of grandeur, Bayle ascribes to congestion of the pia mater, and in some measure to the chronic phlegmasia of the meninges—a double lesion, which simultaneously compresses and irritates the brain. The second period of the mania depends upon an increase and extension of this inflammation; it is at this stage that the false membranes form. The excessive agitation, the epileptiform attacks, and other convulsive motions of all kinds, which supervene during this period, are the effects of a consecutive inflammation of the gray substance of the brain. The third period, that of dementia, with very considerable general paralysis, great weakness of the intellectual capacity, and suppression of ideas, is the indication of great compression of the brain, depending on the continuous progress of the serous effusion which is due to the meningitis. The weak point of Bayle's theory is, that it lays far too great stress upon mere mechanical

conditions, such as pressure and irritation. It is very easy to perceive how the exudation of an acute meningitis can give rise to paralysis and convulsive symptoms by its pressure upon the cortical substance, but it is not so easy to explain how meningeal inflammation can excite delusional ideas.

If such were the case, we should be prepared to expect some similarity between the delirium of meningitis and that of the general paralytic; but the maniacal symptoms observed in the latter resemble common mania much more than meningeal inflammation. The most prevalent view at the present time regards this so-called inflammation as a secondary condition, due to a chronic phlegmasia of the whole brain. The frequent serous effusions, caused partly by atrophy of the brain and partly by other causes, under such dyscratic conditions, possess a very irritating character, and cannot fail, from their pressure and irritation, to give rise to inflammation, tension, and thickening of the meningeal coverings. But if any further proof is required that these thickenings, opacities, and adhesions, as well as the inflammation by which they are caused, are purely secondary phenomena, and are not concerned in the production of the "*delire ambitieux*," it will be found in the fact that these pathological appearances are found in the highest development without any delusional ideas. I have already referred to an interesting case of this kind, and will now give it in detail. As already said, it was in the case of a boy of twelve years of age, the subject of epileptic dementia. He is described as being a healthy boy till he was two years old, when he had a "teething fever." He then had convulsions for the first time. Since then he has had fits almost every day, and sometimes many in a day. At first he fell down, but latterly he merely laughed, trembled, and ran during the paroxysm. No symptoms of paralysis could be detected in the voice or the gait. On opening the skull, the medical officer exclaimed in astonishment that it was an exquisite example of a general paralytic brain. The dura mater was very adherent along the sutures. Skull-cap ordinarily thick, somewhat irregular; four and a half ounces of fluid under the dura mater, between which and the arachnoid there intervened a false membrane, vascular and thicker than the dura mater. This false membrane was adherent all over the surface to the dura mater, and in many places to the arachnoid. The latter membrane was very much thickened, especially over the anterior lobes; this thickening extended downwards, as far as the corpus callosum, along the horizontal fissure. Over the anterior lobes it presented a white, fleshy, gelatinous and œdematous appearance. The vessels of the pia mater were in many places enlarged, varicose, and plugged up by fibrinous clots. The convolutions were pale, anæmic, and extensively atrophied, and the gray matter could be stripped as a continuous membrane off the white substance. As in

general paralysis, the lining membrane of the ventricles over the optic thalamus and corpus striatum was thickened and minutely granular, and the pia mater was adherent to the gray substance at different parts.

The conclusion deducible from the foregoing case requires no comment. I have yet to refer to another theory, viz., that inflammation resulting in adhesion of the pia mater to the cortical substances is the immediate cause of mania in general. Now this appearance is scarcely ever observed except in general paralysis, and it would not be in accordance with strict scientific rules, to apply it to all forms of mania. Another objection is urged, that all wounds involving loss of brain substance can only heal by such adhesions, while they are rarely followed by insanity. This is a species of argument which has been too much used with reference to mental disease, and it seems never to be taken into account that the pathogenetic processes of insanity are diseases *sui generis*, as much so as two fevers due to different specific causes. The one great fact for us is, that a diffuse inflammation of the gray cortical substance extending over many convolutions, is never observed without eminent disturbance of the mind.

Effusion.—The consideration of serous effusions conveniently and naturally follows that of the inflammatory exudations. Insanity, associated with effusion into the meninges of the brain, is of very frequent occurrence. In 411 cases collected by Dr. Skae, subarachnoid serous effusions were found 202 times, and similar collections in the sac of the arachnoid 171. Effusion is not the ultimate condition of the brain upon which insanity depends, for the serous collection is itself the consequence of a prior disease. No one asserts that mania, melancholia, and dementia are accompanied at their commencement by serous effusions; the most which is alleged is, that that suppressed or exhausted activity of the brain which takes the form of dementia may partially be caused by the effusion. The seat of the serous collection, rather than its nature, influences the form in which insanity expresses itself. When it is located principally upon the upper surface of the brain, it is generally attended with great restlessness and fidgety imbecility.

When it is in the lateral ventricles, the loss of mental power keeps an even pace with the increase of the fluid. When the ventricles become full, the patient sinks into complete dementia, and death takes place by serous apoplexy. Great weakness of the limbs, and paralysis of some parts, are frequent symptoms. The brain substance is bloodless, and in some parts appears harder than in others. Very probably the granular appearance of the living membrane of the ventricles in general paralysis has some connection with these fluid collections, though in what way further investigations must determine. It is highly probable that the great part of these serous

effusions is first exuded in the stage of death, else we should find symptoms of pressure upon the brain developed much more frequently than is the case. To meet this objection, it has been said that the brain gradually accustoms itself to the pressure while the serum remains. But in order to prove this, it must be shown that symptoms of pressure have been present for a considerable time during life, and disappeared very slowly. Such conditions, undoubtedly, very often take place, but not always. A great number of cases, especially those without paralysis, never manifest any symptoms of pressure during life, while all general paralytics have a longer or shorter soporous stage in which the serum may probably be effused for the first time.

Effusion into the substance of the brain—*œdema cerebri*—is a condition which has been found in connection with mania and dementia. It is said to occur primarily, but more frequently it is the result of serous collections in the ventricles, which, owing to the thinness of the lining membrane, pass by endosmosis into the substance of the brain. Albers states that it is regularly found in combination with effusion into the cavities of the brain, when the ependyma or lining membrane remains normal, or is atrophied and thickened. That such is not always the case is proved by the autopsy of the following case of dementia. The ventricles of the brain were not over-dilated, and did not contain more than the usual quantity of fluid; their lining membrane was slightly thickened and opaque. A large quantity of yellowish-looking fluid was found under the arachnoid. The gray matter was extremely pale, the white substance soft and *œdematous*, the water running off copiously with every cut of the knife, and rapidly collecting into small lakes in the concave, uneven parts made by the incision. There was *œdema* of the extremities. The last fact favours the supposition that *œdema cerebri* may have no other connection with the brain disease than merely an accidental concomitant of a general *œdematous* state of the body. This is also borne out by Dr. Hagen, who has met with it eighteen times; in all instances there was either *œdema* of the lungs, hydrothorax, *œdema* of the heart, softening of the spleen, or it had been preceded by *œdema* of the extremities or diarrhœa. Dr. Hagen cannot confirm the statements which authors have made respecting its importance. Proper stupor was observed in none of the cases; the forms of disease were mania and dementia, but they presented nothing constant in their symptoms. A kind of stupor sometimes set in simultaneously with and mixed up with the sopor preceding death. He directs attention to the fact that stupor occurs without any *œdema*, and that the latter does not occur exclusively in connection with this condition, but is also found in others, as has been demonstrated by Aubanel and Thore in '*General Paralysis*.'

Next to effusion comes softening. This is seldom an independent disease of the brain. Insanity, associated with cerebral softening and caused thereby, is a very rare phenomenon. Softening of the brain substance does not in itself give rise to mental disease, but is only an accidental alteration added thereto. In this complication the insanity is to be regarded as due to perverted action of the mind, and the symptoms of softening as independent or accidental phenomena. Loss of mental power, dementia, imbecility, and monomania with exaltation, are caused by conditions of the brain, which at the termination of their pathological development result in softening; but the foregoing forms of mental disease are not caused by the latter in itself. Softening of the superficial layers of the gray matter is found in encephalitis and œdema, but not very often. Accordingly, when dementia exists, it is to be referred far more to irritation of the nerve-cells and atrophy consequent thereon than to softening. Cerebral softening, according to its different causes, induces very different trains of symptoms; the inflammatory is accompanied by phenomena indicative of encephalitis, only the pain is less; that resulting from extravasation of blood and serum is attended by symptoms similar to those of apoplexy or fainting; and softening occasioned by obliteration of atheromatous vessels is indicated by attacks of giddiness and apoplectic seizure arising from the previous loss of the cerebral functions. But in all these cases the cerebral softening is only local, and destroys the activity of that function peculiar to the affected part. In softening of the gray matter of the convolutions, we find loss of memory and of imaginative faculty; the patient exhibits want of decision, and a less than usual readiness in the exercise of his judgment; altogether there is a marked decrease in the energy of the intellectual functions. In softening of the white substance we observe paralysis of the limbs and tongue, of the face and the eyes—what is termed general paralysis—when the softening affects a large extent of the white matter, as the posterior part of the centrum ovale of Vieussens, the optic thalami, the corpora striata, and the floor of the lateral and third ventricles, or only paralysis of one of these parts, or of several combined, when they have suffered singly or in combination. Severe pains are experienced in the paralysed parts. As in all paralysis, the general nutrition suffers, and that of the paralysed parts in particular, the digestion and the action of the bowels. No tissue of the paralysed part remains normal when the paralysis has continued any length of time, all atrophy fall off in volume and weight, and present a considerable interstitial deposit of fat between the normal constituents of the tissue. The prognosis must be very unfavorable, for it is but seldom that the softened brain substance heals; and when it does, it is only by passing into induration. When this takes place, spasm of a tonic kind is caused in the paralysed

limbs. Softening caused by inflammation and extravasation of blood heals directly, but the atheromatous very seldom. Red and yellow softening are rarely met with in the insane, and occur not more frequently, perhaps less so, than in others.

Induration.—Induration of the brain is generally limited to certain parts of the organ; we find mention made of an induration of the whole brain, consisting in a certain tough property of the cerebral tissue observed in some cases of typhus fever; but as it is not known whether the insanity which occasionally follows this fever is associated with this alteration or not, it may be left out of view. Authors usually describe induration of the brain occurring—1st, as a scrofulous infiltration; 2nd, as a fibrinous deposit after local inflammations and apoplexy, in the form of a very hard cicatrix, round which the brain-substance is altered and presents a yellowish-green colour; 3rd, as a sequela of softening. The white substance is the principal seat of these partial indurations. They are oftenest found in the centrum ovale of Vicussens, in the optic thalamus, and in the anterior lobes. The cerebellum also presents indurations, the consequence of apoplexy. The form of insanity associated with induration is usually melancholia and dementia. The first symptoms are giddiness and uncommon weakness of the limbs, which are affected with extraordinary stiffness and an imperfect kind of spasm, seldom disappearing until the induration is removed or reduced to a minimum. In aged individuals the symptoms are generally those of senile dementia, with great restlessness and trembling of the limbs, impaired memory, and sometimes difficulty of speech. In those indurations, the sequelæ of apoplexy, a transition from paralysis to spasm, or a combination of both, is not uncommon. The spasm occurs as epilepsy.

Hypertrophy.—Hypertrophy of the brain is met with in two forms in the insane; in the first the organ is merely distended by an over-accumulation of blood; in the second there is an actual increase in the volume of the cerebral substance. These conditions, more especially the latter, are often found associated with melancholia; and when this is the case we frequently find a very extensive and beautiful development of the convolutions. Sometimes they present the most exquisite arching of their upper surface, at others they are flattened by the pressure of the cranium. Certain alterations of the nervous tissue are stated to have been observed in hypertrophy. Many places of the gray matter appear harder than usual; the veins are dilated, forming microscopic varicosities, and some of the smallest are enlarged to four times their ordinary calibre. It is not unreasonable to infer from this condition of the vessels, that they must exercise a pressure upon the nerve-fibres and the multipolar ganglia, and thus an imperfect paralysis of the gray matter will be produced. At the same time the fatty matters of the cortical substance

increase, and a great number of granules and granular bodies are to be observed in it, altering its colour to a yellowish-gray, or even to brown. In many places which appear hard and somewhat depressed, small blood-red spots of the size of a needle's head occur, consisting of blood-corpuscles, granules, and sometimes crystals of hæmatine. They are only small extravasations of blood, which are remarkable from their small size and great number. It has often been observed, that in insanity associated with hypertrophy the patients exhibit a tendency to suicide, a very dull, obstinate disposition, and an incapacity to collect and retain their thoughts. Under this head it is convenient to notice Dr. Skae's observations as to the relative increase in the weight of the cerebellum to that of the cerebrum in the insane generally, but more particularly in general paralysis. These extend over 199 cases, of which 98 were males and 101 females. From the average of the whole it was found that the cerebellum in the males bore the relation of 1 to 6.74 in the insane, and 1 to 7.06 in the sane; in the females, 1 to 6.64 in the insane, and only 1 to 7 in the sane. It ought to be noticed that the relative increase in the weight of the cerebellum does not seem to have been caused by a simultaneous loss of weight in the cerebrum, for the cases experimented on appear to indicate an increased absolute weight of the whole brain as compared with the sane. In connection with this point, the same writer has pointed out that the specific gravity of the brain substance, as a whole, is higher in the insane than the sane; and, what is still more curious as confirmatory of his foregoing observations, that the specific gravity of the cerebellum attains a greater increase in relation to that of the cerebrum, than it does in persons dying sane. Under these circumstances, Dr. Skae asks, "whether it may not be inferred that the cerebellum is the organ through which we exercise self-control—control over the volitions and successions of our thoughts, as well as over the voluntary muscular movements—a perturbed volition, or a loss of self-control, being of all others the most essential, characteristic, and pathognomonic feature of insanity?" All things considered, it appears no very violent assumption to regard the increased weight of the cerebellum as a species of hypertrophy.

Atrophy.—Of recent years considerable attention has been directed to this condition of the brain, and at one time it appeared to have the special mission of founding a peculiar species of mental disease. German writers describe two kinds of cerebral atrophy. In the first it is uniform, extending over a greater or less extent of the brain, with a diminished volume of the atrophied part. In the second it is what is called interstitial—that is to say, the parts on the whole retain their original size, but the solid constituents of the brain substance decrease and atrophy—this is termed marasmatic atrophy. The former is generally associated with induration, and extends

uniformly from the great hemispheres to the optic thalami and corpora striata. It is a secondary process, and very often results from inflammation of the pia mater, which partially closes up the vessels of the brain. The space which the brain does not occupy is filled with fluid. The second, or marasmatic form, is often accompanied by senile arachnoiditis, and, upon section, shows wide openings of stearotic vessels.

The most interesting fact connected with cerebral atrophy is its relation to general paralysis, in which there is a disposition to regard it as preceding the paralysis of muscular motion and the "delire ambitieux." If there is any such connexion, it can only be with marasmatic atrophy, which is rather a pathological process than an anatomical fact. Numerous cases are on record to prove:—1st, that atrophy of the brain-substance is observed without any previous symptoms of paralysis or the "delire ambitieux;" 2nd, that monomania of grandeur occurs in its most perfect types without paralytic phenomena; 3rd, that the same delusional ideas are observed with and without paralysis of the tongue, when no atrophy was recognisable after death. So long as these three facts are not disproved, they serve to show that cerebral atrophy, as an anatomical fact, has no fixed or definite relation either to general paralysis or to monomania of grandeur, or to the two diseases combined.

The exact experiments of Dr. Bucknill upon the absolute atrophy of the brain in insanity, made by comparing the quantity of water which the brain displaces, with the capacity of the cranium, seem to have conclusively determined that all conditions of dementia are associated with a certain degree of cerebral atrophy; for, although it may not be the primary cause of insanity, it is quite in accordance with physiological notions that the nerve-vessels, when placed in conditions of mal-nutrition, should undergo an atrophic process, and thus be rendered incapable of functional activity. Without hazarding any theory, it may be said that we find atrophy of the brain associated with dementia, sometimes combined with a delirious sort of insanity, paralysis of the tongue and body, impaired sensation, and a considerable diminution of the natural heat. It has been observed that the cranium is sometimes thicker on the atrophied side.

Osseous projections and deposits.—In the falx, and adhering to the cranial vault, masses of bone are not unfrequently met with, measuring several inches in size, and weighing from half an ounce to an ounce and a half. Their average thickness is stated at about one to three lines. Although these formations are generally the result of various antecedent pathological process, still they are calculated, from their size, to injure the cerebrum by their pressure and irritation, to alter its nutrition and give rise to a varicose hyperæmia. In this way they may render insanity permanent.

Dr. Meyer, of the Hamburgh asylum, has succeeded in tracing back the pathological process, to which these osseous formations are due, to the Pacchionian granulations. These he regards as the starting-point of the deposits, found in the falx, the transverse sinuses, and the frontal part of the dura mater. The ossification always commences with a chalky incrustation of the epithelial covering, consisting wholly or in greater part of carbonate of lime. As the process advances, the superficial layers of connective tissue adjoining the incrustated epithelium, become involved. Numerous, very small chalk granules, are to be observed between the fibres, which are stiff and brittle, and have lost the disposition peculiar to connective tissue to form wavy or curly bundles. When the superficial layers are completely ossified, the central bundles often retain their natural structure and flexibility intact, and the ossifications are connected to the arachnoid by their thin, fibrous pedicle. After penetrating the dura mater, and forming more or less extensive depressions in the cranial vault, these villous-like processes readily grow into its internal surface, and after its removal project from it in the form of stalactite osteophytes. When they are not wholly ossified, they are easily distinguished by a certain flexibility, as well as by their fibrous pedicle from the osteophytes of the external layer of the dura mater, which forms the periosteum of the internal plate of the skull. Large pieces of bone are formed by the growing together of adjoining groups, often from opposite sides of the falx, through foramina and thinned places which have resulted from the growth of the Pacchionian granulations.

The osseous deposits found in the falx would appear to have most influence upon insanity. Proceeding, as we have seen, from the arachnoid, they always cause a more or less considerable pressure upon the subjacent hemispheres. In the parts subjected to their pressure and irritation, the pia mater has been observed beset with numerous dilated vessels, and these vascular alterations are continued into the brain-substance, which in some places is indurated, in others softened, and almost always somewhat atrophied.

The form of mental disease most frequently associated with these conditions is melancholia. Imbecility is sometimes found connected with the smaller deposits; but in both cases, the condition of the membranes, irritated by a dyscrasic nutrition, appears to have a far more disturbing effect than the ossification itself. The great thickening, often parchment-like character of the meninges, not unfrequently combined with ossific deposits, shows that the nutrition of the brain must have suffered in a very high degree. Ossification of the arteries has been found in dementia. I observe, from the pathological register of Morningside Asylum, that osseous formations are occasionally met with in cases of monomania, particularly of suspicion.

Scrofula, tubercle, cancer, and other tumours.—These conditions, it must be confessed, are very rare in the insane, certainly not less so than in the sane, in whom they are found to cause in only a small fragment of cases some unessential and variable disturbances of the mind, generally not going further than depression and weakness of memory. These facts appear to favour the theory that there must reside in the nervous system of the insane an ultimate irritability of tissue, which tumours and other neoplasms may develop into disease. Scrofulous deposits occur in the brain in infiltrated and isolated forms, but the former are the more frequent. They are to be met with in the arachnoid and pia mater, forming white specks, consisting of sandy, granular bodies. Isolated scrofulous tumours are generally developed in the brain-substance. This condition of the brain is occasionally found in dementia of the scrofulous, in conjunction with serous effusion, and may possibly have some connection with cretinism. In some rare cases, insanity appears to depend on tubercle of the brain, either primarily deposited in that organ, or transplanted thither during the course of pulmonary phthisis. In 184 cases of insanity, associated with tubercle of the lungs, Dr. Clouston, of the Edinburgh Royal Asylum, found it only once. Disease of the mental functions resulting from primary cancer is very unfrequent, because cerebral cancer itself is so exceedingly rare. When it does occur, it oftenest takes the form of meningeal cancer; and so long as it is of small size, it gives rise to no very important symptoms. As its growth progresses, it occasions symptoms of pressure and atrophy of the brain, and by degrees weakness of memory and perverted judgment show themselves, until at length absolute dementia is ushered in. But in many cases this is an exaggerated statement; the disease often stops short with a kind of torpor of the intelligence, which from time to time breaks forth in fitful gleams of reason. Sometimes small cancerous tumours act like foreign bodies in the brain, and cause spasm, and pain, and epilepsy. They also give rise to inflammation of the membranes, and serous effusions into the meninges.

Insanity is occasionally found in association with hydatids of the brain, and fibroids of the dura mater and arachnoid. These, like tumours in general, besides functional disturbances of the cerebral functions, give rise to many and various abnormal expressions of the intellectual faculties, such as impaired memory, the confounding together of recollections, incapacity for minute and sharp reflection and judgment, and, finally, dementia.

Mania and monomania are not observed in connection with tumours of any considerable size; these paralyse the brain too much by their pressure and irritation to permit of these symptoms being developed. Hygromata and cysticeri have been found in the choroid plexus, and encephalo-cysts in the brain-substance. Fibroids are

developed from the pia mater and arachnoid, and from the lining membrane of the ventricles. Besides the general symptoms already mentioned, when they are situated upon the corpus striatum or optic thalamus, they cause hemiplegia, squinting, and impaired speech; while symptoms of cerebral congestion are not wanting.

The last subject is abnormalities of the cranial bones. We observe that in insanity the skull is often unusually thick, and its diploe entirely filled with osseous matter. It is generally believed that this condition, if not quite an accidental occurrence, originates during the progress of the disease. There are some exceptional cases, however, of short duration, in which it is obvious that the thickening could not have taken place after the commencement of insanity. Some advocates of mechanical theories have represented this condition as giving rise to mental disease by pressure and constriction of the cerebral movements, but it is probably an indication that the bones are involved in the same process which affects the brain. It does not speak in favour of this view that this sympathy of the bones nearly as often takes the form of atrophy and thinning, in which, of course, there can be no pressure; but, indeed, both phenomena are met with in the sane. According to Virchow, atrophy of the cranial bones gives rise to weakness of intellect and impaired memory. Hyperostosis of the skull would appear to have some relation to atrophy of the brain-substance, being often found on the atrophied side; but whether as a consequence or a cause has not been satisfactorily determined.

Deviations in the structural build of the skull appear to be of considerably greater importance, being one of the chief peculiarities of cretinism. It is often larger or smaller than it should be, and very unequal in its different diameters. These abnormalities are often found in the insane, and some of them are due to the ossification of the sutures. As regards the relation of these cranial deformities to insanity, it is evident that they cannot be a proximate cause, because they exist a long time before its outbreak, and they are also found in the sane. As a prominent instance, it may be mentioned that the sutures of Lord Byron's skull were found ossified at his early death. They may, however, be regarded as a predisposing cause. Stahl, who has paid considerable attention to this subject, points out that the premature closing of the sutures is not caused by pressure upon the brain, but, on the contrary, is an indication that the organ has grown in and away from the bones in certain directions, and thus permitted their ossification. The symptoms are different according to the degree of deformity. Cretinism sometimes sets in immediately, or at first there may be nothing more than a slight deficiency of natural sharpness, sometimes obstinacy and unmanageableness, until, under the pressure of

the conditions of life, the insufficient intellect completely breaks down, and insanity is ushered in.

This closes the review of the pathological appearances in insanity, and the result which is deducible from the whole foregoing observations is so evident, that it is scarcely necessary to express it. The pathological lesions of the cerebral tissue are not the final and ultimate causes of insanity; for in all cases it is necessary to assume a special and specific irritability of the nervous tissue peculiar to the insane. This granted, they then assume their legitimate position as secondary causes, and take their place with the pathological phenomena of the body in general. In making this assumption, it will be found that medical psychology takes up no position inconsistent with the facts we possess in relation to the causation of disease. In tracing back a disease to its ultimate source, we never get beyond the exciting or secondary causes. We have established pretty clearly that almost every individual and every family has a "predisposition" to some special malady, constitutional or acquired. There the "problem begins," and we wisely fall back upon the exciting causes which develop this "predisposition" (as we in our ignorance call it) into active disease. The same holds good in insanity; there is an ultimate and peculiar idiosyncrasy, constitutional or acquired, which, under certain conditions, such as congestion or anæmia, is rapidly developed into mental disease, and these abnormalities in nutrition, in their turn, give rise to pathological alterations of the brain-substance which deprave or destroy the functions of the mind.

The Genesis of Mind. By HENRY MAUDSLEY, M.D.

(Continued from vol. vii, p. 494.)

It might seem unaccountable that, notwithstanding the common sense of mankind has in all ages recognised the existence of intellect in animals, certain philosophers should always have been found to repudiate the vulgar opinion; were it not that experience proves there is much truth in the description which Condillac gives of the philosophers, as "men who love much better an absurdity that they imagine than a truth which all the world adopts." Though Plato tells us that in the golden age men derived all their knowledge from communication with beasts, and though the little understood and much misunderstood Egyptians of old paid divine honours to certain animals—not, as is sometimes superficially concluded, on account of their brute wisdom, but really

as living symbols of Divine intelligence, which they embodied and instinctively displayed—yet the Cartesian philosophy actually denied sensibility to animals, and designated them living machines. For such unmerited ignominy they have, however, been more than compensated by writers who, like M. Charles Bonnet, maintain the existence of immortal souls in them, and predict for them a future world and a happier destiny.* The ancients would appear generally to have entertained a somewhat similar opinion; for, without referring to the doctrine of metempsychosis, we have the authority of Homer, who represents Orion as chasing the souls of stags over the plains of hell. And modern instinct, when not perverted by the prejudices and conceit of learning, never fails to acknowledge the rationality of brutes. According to a Scandinavian aphorism, the bear has the strength of ten men and the sense of twelve; and the Red Indians are so impressed with the intellectual powers of this animal that, whenever they have killed one, they scrupulously strive to appease its manes with various important ceremonies. They deck out its head with various trinkets, and make a long speech in which the courage of the departed is praised, its living relatives profusely complimented, and a hope expressed that the conduct of its slayer has been satisfactory both to itself and them.† The intelligence of civilisation may dismiss with a smile of pity or contempt such barbarous displays; but the most advanced intelligence will not forget that there is some substratum of truth beneath every superstition, by virtue of which it lives. As no nation ever yet worshipped a piece of carved wood or chiselled stone otherwise than as a symbol of the Great Incomprehensible, by which both barbarous and civilised men are surrounded; so we may rest satisfied that the Red Indian only labours to propitiate the ghost of the bear because he has at times found, to his cost, that its intelligence has surpassed his own. The extremes of attributing too much and too little intelligence to animals will, however, be alike avoided by that sincere and unbiassed observation which, while discrediting all exaggerated theories, willingly recognises the undoubted existence in them of intelligence in its rudimentary form, and strives to point out the evidences of its gradual development through them.

* “Are not these dumb friends of ours, persons rather than things? Is not their soul ampler, as Plato would say, than their body, and contains rather than is contained? Is not what lives and wills in them, and is affectionate, as spiritual, as immaterial, as truly removed from mere flesh, blood, and bones, as that soul which is the proper self of their master?” (*Horæ Subsecivæ*, 2nd series, by J. Brown, M.D.)

“Who knoweth that the spirit of man goeth upward, and that the spirit of the beast goeth downward to the earth?” (*Ecclesiastes*, c. iii, v. 21.)

“There is in every animal’s eye a dim image and gleam of humanity, a flash of strange light, through which their life looks out and up to our great mystery of command over them, and claims the fellowship of the creature, if not of the soul.” (Ruskin.)

† ‘*Natural History of Mammalia*,’ Rev. J. G. Wood.

As we carry investigation upwards through the mammalia, a very marked advance is observable in the development of the cerebrum. Commencing with the simple brain of the marsupials, which is destitute of convolutions, and even inferior to that of the parrot, we ascend quite gradually upwards to the largely convoluted brain of the monkey, which most nearly resembles that of man. A mean comparison of the weight of the brain to that of the body in mammals, birds, reptiles, and fishes, will show strikingly the great increase which takes place in that organ amongst the higher animals. As a result of his own observations, and of a careful collection of the observations of others, Leuret concluded that the relation between the brain and the body was.

In fishes	as 1 to 5668
In reptiles	1 to 1321
In birds	1 to 212
In mammalia	1 to 186*

That the intelligence of the mammalia as greatly surpasses that of the animals below them as these figures would lead us to anticipate, there would be no difficulty in demonstrating, even if men were left out of consideration. But it is not desirable to leave men out, and so to violate nature by arbitrarily ignoring a progression which undoubtedly exists. Although in his cultivated state man may appear so far beyond any other animal in intelligence, that no figures representing the height or breadth or depth of his brain, as compared with that of the animal, will at all adequately express the important functional differences between them, yet as we trace human development backwards towards its origin these differences become less marked. Not only, however, is the Bosjesman infinitely less intelligent than the European, but his type of brain is of an inferior order; so that his intelligence, under the best circumstances, cannot possibly equal that of a well-developed European. Nature has pronounced him of a lower grade, and has assigned him the humble position of a link leading to something higher. It is true that information is yet wanting on the extent of variation exhibited by the brain among the different races of mankind; but such differences as there are between the highest and the lowest races are undoubtedly of the same order although less in degree than those which distinguish the human from the simian brain. The brains of savages seem, indeed, to remain for the present to prove that the gradual progression which is observable in the development of an individual brain has been the rule in the development of the brain of mankind; while there is every probability that as the individual organ passes out of the inferior into the superior state, so the inferior brain of the savage is inexor-

* 'Leuret,' op. cit., p. 423. These figures are here given for the purpose of a general illustration. They have not any special value, as Gratiolet has pointed out, because the relations of the different parts of brain are not taken into account.

ably doomed to pass away and give place to the superior organ, which exists in certain parts of the world. By a law of progressive development inferiority is extinguished in the species. And though the brain of a Bosjesman, being in harmony with its conditions in Africa, serves its purpose there, yet we have only to imagine it placed within the skull of an European in the circumstances of civilisation, and the result would be called imbecility or idiocy. Regarding the order of progression in nature, it would appear inevitable that it must sooner or later be superseded by the higher type of brain which exists upon the earth. Ages have elapsed while this process of replacement has been going on, and ages may elapse before it is completed, but the inference is none the less just on that account; for nature regards not time, and condenses into a single life processes which, at one time, have required epochs for their evolution. So great a potentiality has the foetal brain of man, for example, that in the course of a few weeks it passes through and beyond all the stages of brain-development represented in the successively advancing orders or individuals of the mammalia. Similarly, also, when brought into the conditions of a favorable activity does the human brain reflect, as it were, in a year's time the various stages of advancing intelligence in the animal kingdom, and the ages of time which the geological records prove to have been necessary to the development of such intelligence therein.

In selecting examples of the intelligence of the mammalia, there is the greatest difficulty in determining where to begin and where to end; the illustrations are so many, so varied, and so interesting, that, overwhelmed by the number, and yet attracted by the interesting variety, the prospect of a judicious choice is hopeless. As the dog, of all animals, has been brought into the closest converse with man, and has thus been subjected to the most patient education, it affords the most striking instances of rational development, and even exhibits remarkable illustrations of a sort of moral feeling. Nevertheless, attentive observation will discover other individuals in the mammalian class which possess the rudiments of as great intelligence as the dog, but which, never having been so highly trained through generations, do not afford such remarkable exhibitions thereof as an animal which seems to have been educated to the utmost extent of its possibilities. The elephant appears to be one of the most gentle and intelligent animals by nature; Aristotle maintained that it surpassed all other animals in its power of comprehension, and it was thought worthy by the Eastern disciples of metempsychosis to receive the souls of the Indian emperors. Its character is gentle and peaceable; it lives on vegetable food, and, except at certain periods of the year when it is veritably mad, it never attacks but when provoked. In captivity it becomes, when treated with kindness and intelligence, a most valuable servant; and its keepers often maintain that it understands everything that is said to it. But so

high an innate sense of justice has it, that it is well known to be a most dangerous thing to break faith with it; its vengeance is sure, and sometimes fatal. The tailor who, instead of offering the usual biscuit, mischievously pricked its trunk with his needle, was simply deluged with a shower of dirty water from the offended organ, but the life of him who cruelly treats the lordly brute is likely enough to be sacrificed to its anger. Some elephants are undoubtedly also highly sensitive to music, and will manifest by their expression and movements their sympathy with the tender or passionate character of the melody. But they are not animals which propagate in captivity, and, though eminently sociable and living usually in companies, when the time of love comes on, each male, accompanied by a female, retires to the depths of the forest, moved thereto, as it would seem, by a sentiment of modesty. Wherefore it is not possible with the elephant to accumulate the effects of education through generations, as is so usefully done with dogs. Not that any one of the latter animals ever transmits the actual results of its education to the progeny, but it scarcely admits of question that the acquired intelligence of the parent does impart an increased educability, within certain limits, to the offspring, and sometimes even implants itself as a new instinct in the constitution. The same law is seen in operation in a more marked manner and on a more important scale amongst mankind. Few, if any, believe that the individual Bosjesman or native Australian, though placed under the best European tuition, could possibly be educated to the average point of European intelligence; but it would be quite at variance with the view which man has of his nature and his destiny to suppose that the native Australian or the Bosjesman might not, by the influence of education and favorable conditions through many generations, be elevated to the grade of the ordinary European intellect.

What effect the influence of human reason working through generations might have on the elephant in developing the possibilities of its type, though interesting as a speculation, is not of great practical moment; for the examples of elephantine intelligence which already abound are of so remarkable a character as to excite much wonder that any one should be found content to refer them to instinct. Sir Emerson Tennant mentions a pair of elephants that were accustomed to labour together in piling wood, and which had been taught to raise their wood-piles to a considerable height by constructing an inclined plane of sloping beams, and rolling their logs up these. In the same work on Ceylon, he also tells of meeting face to face, in a narrow path, an elephant without any attendant, which was carrying a heavy beam of timber; it was grunting in a very dissatisfied way, because the narrowness of the path compelled it to bend its head constantly to one side in order to let the wood pass, and thus caused it much exertion and inconvenience. As the

pathway was too narrow to permit Sir Emerson, who was on horse-back, to pass, the elephant flung down the timber and forced itself back into the brush-wood, so as to leave a clear passage. "My horse still hesitated; the elephant observed, and impatiently thrust himself still deeper in the jungle, repeating its cry of 'urmph,' but in a voice evidently meant to encourage us to come on. Still the horse trembled, and anxious to observe the instinct of the two sagacious creatures, I forbore any interference; again the elephant wedged himself further in amongst the trees, and waited impatiently for us to pass him, and after the horse had done so, tremblingly and timidly, I saw the wise creature stoop and take up his heavy burden, turn and balance it on his tusks, and resume his route, hoarsely shouting, as before, his discontented remonstrance." Here, at any rate, we shall not be inclined to dissent from the opinion of Locke, when he says, with reference to the question whether elephants and dogs think, that "they give all the demonstration of it imaginable, except only telling us that they do so."

Some will strenuously hold, and with much reason, that dogs do tell us that they think, or at any rate that they strive very hard to do so; and it must be impossible to look down into the intelligently beaming eyes of a pet terrier, without feeling at times a real pity for it—pity for its inability to express that which plainly it is eagerly panting to tell. And how joyous is the creature if its inarticulate eloquence be understood, how happy and abandoned in its delight! It seems as painful a thing for a dog not to be understood, or to be misunderstood, as it is for a mortal. "If Pliny's elephant repeating its lesson in the moonshine is not to be credited, nor Ptolemy's stag who understood Greek, nor Plutarch's dog who could counterfeit the very convulsions of death, nor that goose which was disciple to a philosopher, what shall we say to an ape that could play chess, or of another that had learnt some touches upon a guitar. But let who will judge of Francis the First's dog; that king, having lost his gloves as he was hunting, and having sent him in search of them, and he, after a tedious inquiry, returning without them, being reprimanded by his master, runs directly to Paris, and leaps up at a stall where he had formerly observed gloves hang out, and tears down a pair and carries them three leagues back again to the king."* We remark here in the dog an accurate comprehension of its master's injunctions, persevering efforts to fulfil them, grief of dog's mind at the master's displeasure on account of its want of success, an accurate remembrance of the place where similar gloves were exposed, and a determination to supply at any cost its master's necessities. Every one may imagine for himself the ideas or notions which must have passed through the dog's mind, and the order of their succession, in the accomplishment of its difficult task. In his interesting "History

* The reference is lost; but it was to some old book by a 'Gentleman of Quality.'

of Mammalia," the Rev. J. G. Wood, amongst other wonderful anecdotes, relates the following of a comical little dog which he met with, and which he believes to have been the barbet—a diminutive variety of the poodle. It was not larger than an ordinary rabbit, and was a most amusing and clever little animal, "readily picking up acquirements and inventing new accomplishments of its own." He would sit at the piano, and sing a song to his own accompaniment, the manual, or rather pedal part of the performance being achieved by a dexterous patting of the keys, and the vocal efforts by a prolonged and modulated howl. He could also 'talk' by uttering little yelps in rapid succession. Like all pet dogs, he was jealous of disposition, and could not bear that any one, not excepting his mistress, should be more noticed than himself. When his mistress was ill, he was much aggrieved at the exclusive attention which was given to the invalid, and cast about in his doggish brain for some method of attracting the notice which he coveted. It is supposed that he must have watched the interview between medical man and patient, and have settled in his mind the attraction which exercised so powerful an influence upon the physician; for just as the well-known carriage drew up to the door, Quiz got on a chair, sat up on his hind legs, and began to put out his tongue, and held forth his paw as he had seen his mistress do, and evidently expected to be treated in a similar manner. His purpose was certainly gained, for he attracted universal attention by his ruse."

In place of multiplying, as might be easily done, the examples of animal intelligence, it will be satisfactory to select such instances as evince emotional feeling on the part of brutes; and the more so, as the existence of the latter, when of a higher character than a mere passion, may be regarded as a proof of the existence of a correlative intellectual power.* It has been said that animals "seem destitute of sympathy with each other, indifferent to each other's sufferings or joys, and unmoved by the worst usage or acutest pangs of their fellows. Indeed, if we except some associated labours in the insect class, principally referring to the continuation of the species, and securing a supply of food, and some joint operations of the male and female in the higher classes, animals seem entirely incapable of concert or co-operation for a common end."† Such a statement is, however, much too general, and stands in need of considerable limitation. Not to mention those wild creatures which unite together to hunt down an animal that would speedily destroy any individual of them, there are undoubted instances of co-operation for mutual help under unusual circumstances, even amongst humble animals.

* By speaking of mere passion, it is intended to denote the low self-feelings, the lowest emotions—the Egoistic as distinguished from the Altruistic emotional life, as Comte would have it.

† 'Lectures on man.' Lawrence, p. 202.

A gentleman, seeing two stoats in the path, picks up a stone and, flinging it, knocks one of them over. The other uttered a loud and peculiar cry, which was answered by a number of its companions that rush upon the assailant, running up his body to get at the neck. He was compelled, after in vain fighting against them, to put his hands round his neck and to run away. He ran four miles, and when he arrived at his own stables, five stoats that had hung to his body were killed by the servants; others had dropped off as he ran. The common brown rats are capable of a wonderful combination, and when they do act in concert become formidable. They have been known to attack a cat, and to inflict such serious injuries, that the latter had to be killed. Dogs afford some remarkable instances of active sympathetic aid rendered to one another. A certain dog, in the eager pursuit of a rabbit, got fixed in a hole; two friendly dogs remained with it night and day, till by their exertions they had extricated it. A peaceable and not very brave dog, in passing a butcher's shop, was smartly punished by a terrier that rushed out of it; but it had a friend, a well-bred bull-terrier, to which it was observed to be particularly attached for some days after its misfortune, and when next it passed the butcher's shop it was accompanied by the terrier. The butcher's dog rushed out as before, but was received by the friendly terrier, and tumbled over and over amidst the joyful barks of its former victim.* Other such cases are on record; and a very interesting one is related by Mrs. S. C. Hall. "Neptune, a large Newfoundland, had a warm friendship for a very pretty retriever, Charger by name, who, in addition to very warm affections, possessed a very hot temper. In short, he was a decidedly quarrelsome dog, but Neptune overlooked his friend's faults, and bore his ill temper with the most dignified gravity, turning away his head and not seeming to hear his snarls or even feel his snaps. But all dogs were not equally charitable, and Charger had a long-standing quarrel with a huge bull-dog, I believe it was—for it was ugly and ferocious enough to have been a bull-dog—belonging to a butcher. It so chanced that Charger and the bull-dog met somewhere, and the result was that our beautiful retriever was brought home so fearfully mangled that it was a question whether it should not be shot at once; everything like recovery seemed impossible. But I really think Neptune saved his life. The trusty friend applied himself carefully to licking his wounds, hanging over him with such tenderness, and gazing at his master with such mute entreaty, that it was decided to leave the dogs together for that night. The devotion of the great dog knew no change; he suffered any of the people to dress his friend's wounds or feed him, but he growled if they attempted to remove him. Although after the

* A case precisely similar was communicated to the writer on the most reliable testimony.

lapse of ten or twelve days he could limp to the sunny spots of the lawn, always attended by Neptune, it was quite three months before Charger was himself again; and his recovery was entirely attributed to Neptune, who ever after was called Doctor Neptune—a distinction which he received with his usual gravity.” Now, Neptune himself was not a quarrelsome dog, but sedate, dignified, and peaceable; but as soon as Charger was fully recovered, the two set off together, furiously fell upon the bull-dog, and did not leave it till they had killed it. The anecdote evinces an amount of compassionate sympathy, of kindly and assiduous attention, a patient forbearance, and a co-operation in the execution of desperate punishment, which testify to an unexpected emotional sensibility, as well as to considerable reasoning power. Neptune was the good Samaritan in season; but he was also the determined executor of an avenging justice; and though his justice, like the primitive justice of mankind, was certainly a vengeance, it was still a vengeance called forth by a feeling of moral indignation on account of a friend’s wrongs, and, at any rate, executed in complete abnegation of self. Another instance of active animal benevolence is given by M. de la Boussanelle, a captain of cavalry.* A horse in his company being very old, had worn its teeth quite away, so that it was no longer able to chew its hay or to crush its oats. For two months it was actually fed by the two horses that stood one on each side of it; they masticated the hay, and then placed it before the old infirm animal, and so likewise with the oats. He affirms that the entire company, officers and soldiers, witnessed the fact, and could testify to it. We have no name whereby to describe this kindly feeling and active sympathy amongst animals; for man has appropriated the honour thereof to himself, and calls it humanity—which is part of his system; for when he has done anything so abominably vicious and unnatural, that no brute ever did the like, he calls the act brutal.

That animals possess imagination is proved by the fact that they dream, which children seem not to do for a year or two after birth;† and that dogs as well as some birds of prey doubt, is made manifest when they will not pursue the game, sometimes because it is too far off, and at other times appear undecided whether to do so

* ‘Observations Militaires,’ Paris, 1860, quoted by Gratiolet, ‘Anat. Comp. du Syst. Nerv., &c.,’ p. 642. Gratiolet relates how two young bears were to be poisoned by throwing to them strong doses of arsenious acid in their food. To save the mother, she was shut up in a cage; the young ones, however, to console their mother, carried portions of the food to her. ‘Des Hommes éminents, et, entres autres, M. de Blainville furent témoins du cette scène,’ p. 642.

† According to Aristotle, children do not dream in earliest infancy—only do so when they are about four or five years old. In another part, however, he says that the new-born infant dreams, but only remembers its dreams later on in life. Burdach says, the child at the breast dreams, but forgets its dreams till about seven years old. Gratiolet, however, clearly recollects having dreamed when about three years old. (Gratiolet, *op. cit.*, note, p. 497.)

or not. Other animals exhibit like hesitation and deliberation. "The mules of South America," says Humboldt, "when they feel themselves in danger stop, turning their heads to the right and to the left. The motions of their ears seem to indicate that they reflect on the decision they ought to take. Their resolution is slow, but always just, if it be free."*

Coleridge was accustomed to regard the dog as the most affectionate of animals, and he is said to have remarked that "the dog alone of all brute animals has a *σώρυγη* or affection *upwards* to man."† Though it is scarcely correct to say that it is the only animal which exhibits an affection upwards to man, as even the unwieldy hippopotamus becomes excessively fond of its sable attendant, there can be no question that the dog manifests such a feeling in a higher degree and in a more varied manner than any other creature. Marvellous and truly affecting examples testify to its intense love for its master; persistent neglect and continued ill treatment quench not the deep passion; and the brutal master's life has not unfrequently been saved by the faithful intelligence of his ill-used, and, one might almost say, humane, dog. It will guard carefully its master's property, dreading his reproach, and hoping for his approbation; it will avenge his insults and minister to his wants; it will die bravely in his defence, or pine away in slow grief over his grave. The sorrow and self-control, too, which outlast hunger in animal nature must be very great; and as dogs, left in some charge, and not duly relieved therefrom, have, from a sense of duty, dwindled down almost to skeletons, or have actually died rather than desert their posts, their moral restraint must not be lightly esteemed.

The phrenologists have, with their accustomed dogmatism, denied the sentiment of veneration to animals; but the creature of an inferior type of intelligence, evidently sometimes not merely fears but venerates the superior creature, and amongst those animals of the same class which choose an experienced chief and obey him, there is the clearest veneration for his superior wisdom. But if every other animal was left out of consideration, it would seem impossible to doubt the dog's veneration for man. As Burns has said, and as Bacon said before him, "Man is the god of the dog." Now the native Australian believes his deity to be inferior to the white man—regards it as vanquished, dethroned, and buried under the earth, existing even there only by sufferance. And as we do not question the existence of intelligence or of moral feeling in the native Australian, though he entertain such absurd notions, but rather discover the rudiments of both intelligence and moral feeling in him, it behoves us rightly to make all fair allowance in estimating the moral and intellectual faculties of the dog, which,

* 'Aspects of Nature.'

† 'Table Talk.'

however much inferior in type, are yet more truly and legitimately developed in its aspirations, than are those of the native Australian in the direction which they take. It is with the superior being, man, that it rests, what shall be vice to his dog and what virtue; he may teach it to refrain from taking that which it should not have, or he may teach it to steal with great cunning, and to look on success in such business with satisfaction. The master, in fact, makes the moral sense of his dog; and, just as the unhappy infant, born in an atmosphere of thieving, and nourished amid the unfavorable circumstances of a general immorality, grows up with a "moral sense," the good of which is evil, or rather with an "immoral sense," so the dog which has been subjected to the education of rascality inevitably works according to the system in which it has been developed, and worships the divinity that has presided over it.* There is a well-known story of a drover who used to steal sheep by the help of his dog. His plan was to indicate to it by some gesture the particular sheep which he wished to have, and then to send on the flock under the care of his dog, himself lagging behind. The clever animal contrived to mix the flocks, and, in the separation of them, to carry off the desired sheep. Of course, if the loss was discovered, it was put down as a mistake of the dog; but if not, the drover soon put his own mark on the sheep. Even the clever shoplifter does not sometimes disdain the assistance of a suitably trained dog, which in its thieving simply acts according to its light. On the other hand, Hogg, the "Ettrick Shepherd" tells how he has known a cur-dog to mount guard night and day over a dairy full of milk and cream, and never so much as touch the milk or permit a cat or rat to do so either. It is evident, then, that the conscience of the dog is mainly derived, though whether its existence presupposes the presence of an original moral germ implanted in the canine constitution, is a question that may well be left to the consideration of those philosophers who maintain, in the case of the human subject, that the development of moral idea presupposes necessarily the rudimentary existence of moral sentiment. The well-trained dog's conscience, so plainly rebuking it when it has sinned, surely no one can refuse to acknowledge. When the animal has, from some strong temptation, betrayed its master's confidence, how painfully conscious does it appear of its delinquency! With what a look of disgrace it shrinks away from the accusing eye—with a feeling seemingly compounded of fear, shame, grief, with a tinge of remorse, severally indicated in the timid shrinking,

* "Oh Lord! how I do love thieving: if I had thousands I would still be a thief," once exclaimed an unrepentant young female criminal, whose innate "moral sense" had unhappily taken flight somewhere. For evidence of the utter hopelessness of reforming many criminals, see reports of governors of gaols; for evidence of the cunning cleverness of these unreformable rogues, see reports of chaplains of gaols.

the conscience-stricken tail dropped between the legs, the sorrowful imploring countenance, and by-and-by the repentant, reconciliation-inviting wag of the reviving tail.

It would not be an easy task, it would be, perhaps, impossible, to prove that the primitive moral sense of which the dog is possessed, differs in anything but degree from that of mankind. Reflection upon the nature and origin of the moral sentiments seems to indicate that their existence depends upon the condition of mental development. They are moral cognitions, and the highest cognitions to which the mind can attain. Thus, for example, the highest moral feelings in man are feelings arising from certain abstract ideas—benevolence is the agreeable feeling springing from the idea of accomplishing the good of another, esteem is the pleasing emotion springing from the idea of the virtues of another, and so with other sentiments—they are all the correlatives of certain ideas which are evolved in the course of an advanced intellectual development. Now, it is evident that man only can be affected agreeably or painfully by abstract ideas, for the brute cannot receive them, and of course cannot feel them. Neither, however, it must be kept in mind, are the inferior human races able to receive any but simple ideas. The native Australian has no words in his language corresponding to justice, virtue or sin, and he is utterly incapable of receiving the abstract notions which these words excite in the cultivated European mind. An act of generosity or mercy would be almost, if not quite, as incomprehensible to this miserable savage as to a dog.* In like manner the early inhabitants of the earth had not any abstract language; when they thought of an act of justice, it was as some visible act performed by some deity. So that when we say that the moral feeling of the dog is confined to the concrete, and not to the concrete particular, but, inasmuch as it is capable of general ideas, to the concrete general, we only signalise a degree in its development a little lower than that which characterises the lowest human being. In fact, the moral cognitions are very imperfect, or altogether wanting, in early mental development, whether we trace it as it takes place in the animal kingdom, or in the child, or in those barbarians of the present day who represent the childhood of humanity. And what has been a little while ago said of the differences in the development of the brain among the different races of mankind, may be repeated of the differences in its function. The intellectual differences between the lower and the higher races, though less in degree than, are yet of the same order as, those which distinguish animal intelligence from the lowest human intelligence.

* Touching the moral sense in man, it may not be inappropriate to quote here what J. S. Mill says, when speaking of religious belief—"a case instructive in many ways; and not least so as forming a most striking instance of the fallibility of what is called the moral sense; for the *odium theologicum*, in a sincere bigot, is one of the most unequivocal cases of moral feeling."—('On Liberty.') J. Stewart Mill.

The examples which have been given of canine psychology appear to indicate the existence in dogs of the rudiments of emotional feeling of the higher order, which further observation may not prove to be so plainly displayed by animals that certainly seem to be superior to them in intelligence. In fact, the monkeys, though surpassing all the lower animals in intellectual powers, by no means equal the dogs in that sincere but rudimentary appreciation of moral relations which some of the latter exhibit. The higher animal seems, for the most part, to use its superior powers only for selfish and mischievous purposes; and there is all the difference between the cunning monkey and the well-trained, honest dog, that there is between the simplest, dumbest peasant—kind, hearty, and sound to the core—and the clever educated thief, who is utterly incapable of realising moral truths, and uses his advantages only for the more successful gratification of his depraved passions.* Or more justly, perhaps, might the monkey's intelligence be compared to that displayed by certain demented or idiotic human beings, who, dead as it were to outward relations, are yet capable of very remarkable exercises of cunning in the gratification of self.

It is, incidentally, a reflection not a little striking, that the various mental characteristics of the different species of animals are sometimes manifested by different individuals amongst mankind; so that the fable of metempsychosis, which was Indian, Egyptian, and Grecian, may, to those who look beneath the surface of forms and words, appear to have a real signification. As in his bodily organization, so in his mental phenomena, man contains all that has gone before of the same kind. In some we have the gentle, patient, intelligent endurance of the elephant, in others the savage and cowardly cruelty of the tiger; some exhibit the stealthy, desperate, creeping cunning of the panther, and not a few are endowed with the obstinacy of the ass; one has the undemonstrative and generous courage attributed to the lion, while another may boast of the ignominious humility of the jackal, that waits upon the lordly beast. Some depraved mortals may manifest the characteristics of one of these animal types, and others those of another; but by far the most common form of human degeneration is that in which the animal propensities generally, in place of being subjugated to the control of a developed intellect and well-formed will, actually govern the intellect and will, and degrade them, as in the monkey, to their ignoble service. But this, though right seemingly for the monkey, is certainly not right for man; for while the evolution of the type of the

* If it be asked, whether the monkey is really, then, mentally higher than the dog, the reply is, that it is of a higher type, though of a lower development, than the domesticated dog. The effect upon the latter of human influence through generations has been not only to bring out all the possibilities of its type, but seemingly to impart to it some of the virtue of the human type; so that the number of its ideas is increased, and such ideas as it has are more acutely felt, as canine emotions testify.

former appears to consist in the development of reason within the circle of self, the just evolution of the human type undoubtedly consists in development out of self—in that realisation of the moral relations of the universe, which constitutes the highest intellectual and moral development.

The foregoing considerations lead us to remark that it is a mistaken waste of power to attempt by education to assimilate any animal to man; for the true education of every animal is to realise the possibility of its particular type—fully to display the teleiotic idea which it embodies. The difference of mental species is as important a fact as the difference of bodily species; and not till a way of compassing the transmutation of the latter has been discovered need there be any hope of transmuting the former. Accordingly, as might be expected, no amount of education during one generation has any effect in humanising the simian character; for although monkeys are gentle enough in youth, when, as we have seen, they are least removed from the human type, they almost invariably become mischievous, selfishly cruel, and utterly unmanageable as they grow up.* Though subjected to the most severe and steady training, the monkey cannot be prevented from stealing; however keenly alive to the grievous consequences of the act, it cannot resist it; steal it must, and steal it will, for its reason is the slave of its passion. Du Chaillu gives an interesting account of a young chimpanzee, which he caught and which he named "Joe"; and which acquired quite naturally, he says, two of the vices of civilization, stealing and drunkenness. It would enter his room in the morning, and, if he appeared to be asleep, would straightway make its way to the sugar-basin; if, however, he was awake, the cunning creature jumped on to his bed as though eager to be caressed. Sometimes Du Chaillu would feign to be asleep when it came in, and suddenly to wake up; Joe, if he had not already got as far as the sugar-basin, would jump on the bed seemingly overjoyed at its master's awakening; but if he was in the act of depredation, Joe made off at his utmost speed. He ultimately fell a victim to a bottle of brandy, which he had contrived to steal. It may be observed that what the dog must be taught with much care and patience to do well, the monkey artistically accomplishes quite naturally, and cannot be taught to refrain from doing. It cannot apparently acquire moral control. Whether by the influence of education through many generations, the character of the monkey might not be raised to a higher moral standard, is not so certain, and not likely, any way, to be decided.

Numerous examples might be given of the innate moral depravity

* As the physiognomy of the young chimpanzee is much more human than that of the full-grown animal, so the mental phenomena of the young are much nearer the human type than those of the full-grown chimpanzees; as the latter grow up, they develop into the specialities of the monkey type.

of the quadrumana, which in some amounts to downright moral insanity. Thus the mandrill—*Papio maimon*—is very easily excited to anger, and sometimes boils up into such a storm of fierce and vicious passion, that it has been known to fall down lifeless. It moreover, unlike most other monkeys, cherishes its rancour, and will maliciously pretend to have forgotten the offence in order to wreak its vengeance the better on a favorable occasion. In its passion it may be compared to the maniacal child, or to certain idiots, who, in paroxysms of violent anger, will sometimes fall down in actual convulsions. Again, a well-authenticated tale is told of a true baboon, which played various tricks for the pecuniary benefit of its master.* It used regularly to steal its own food; and the way in which on one occasion it got the better of a date-seller was admirably ingenious. Simulating a fit, it fell down as if in great pain, and rolled about the ground in apparent convulsions. But every writhing of its body brought it nearer and nearer the basket of dates, and when it came within reach of them, it emptied the basket with its hind feet, engaging the attention of the vendor meanwhile by its strange grimaces.

Another curious story, perhaps not quite so well authenticated, is told of the same animal. Its master had taught it to watch the cooking of his dinner while he was engaged in his occupation away from home. One day he put a fowl in the pot, and left it in charge of the baboon as usual. Curiosity overcoming the guardian, it took off the lid of the pot; the savoury odour which rushed out proved too much for its virtue; it tasted the fowl, took a little more and a little more, until it finally demolished the whole. Remorse thereupon followed; and a deadly fear fell upon the unfaithful servant. Something must be done to conceal the crime; and its ingenuity was sharpened by its fear. Rolling itself in the dust so as to cover nearly the whole body with a uniform coating thereof, it gathered itself into a heap with its hands and knees upon the ground, so as to present the appearance of a rough block of stone, with two pieces of raw meat on the top (the posterior red callosities). Some kites, attracted by the smell of the fowl, and seeing what they thought to be two pieces of raw meat, immediately pounced upon the fancied prize. A quick grasp, and one of them was caught, and, notwithstanding its struggles, forced into the boiling pot. The psychological character of the monkey is so well revealed in the story that it deserves to be true, whether it is so or not. One may add, that man is not the only being who is capable of using other animals for his amusement; for Humboldt tells of a Capucin monkey which was accustomed to catch a pig every morning, and, mounting on its back, to ride it for the rest of the day; even while the pig was feeding in the savannahs its rider kept its seat.

* Rev. J. G. Wood, *op. cit.*

The simiadæ exhibit in an extravagant manner all the inferior kinds of emotion, fear, jealousy, envy, hatred, malice, and all uncharitableness; but they do not seem to be capable of the higher emotions; although, in their exceeding cunning, they will, from an interested motive, at times feign a kindness and benevolence which they do not sincerely feel. A papion, whose wife had died, was the father of a little one that had been born in a menagerie. The young creature was unhealthy, stunted and rachitic; and it slept every night in the arms of its father, who gave it the greatest possible care. It was the object also of particular attention on the part of other monkeys, which not only forbore injuring it in any way, but caressed it in all sorts of ways. For this kind attention, however, those who observed the matter were quite certain that it was solely indebted to a lively dread of the long teeth and great strength of its parent. The manner in which a new arrival acquires its right of domicile in a cage of monkeys is singular. Almost all the old residents are inclined to quarrel with and persecute it, but they take good care, before doing so, to examine the length of its teeth, and to make themselves acquainted with its strength. The quarrelsome habit compels the keeper to have the little animals separate, unless some larger monkeys are willing to constitute themselves their protectors. Now, the cynocephali, though naturally cruel enough, happen to be rather fond of little ones, and, as they are of a changeable disposition, they prefer the new arrivals to those that have been with them for some time. Advantage is taken of this, and the monkeys that need protection are placed in the same sleeping cage with them; there is no fear then for the little ones.* It would not be wise to credit the cynocephali with much real kindness, this good habit of theirs notwithstanding; it may be that the explanation of the capricious and short-lived affection is to be found in the malicious delight which the big animal feels in disappointing the cruelty of the smaller bullies, and in the self-satisfaction which it derives from the exercise of its despotic power. Such motives for a capricious kindness are not altogether foreign to human nature.

Injustice must not, however, be done to the monkeys, lest in the present state of opinion the accusation be made of irreverence to our remote progenitors. The monkeys of the New World are generally of a gentler disposition than those of the Old World, and some even approach to amiability of character. Thus the Ateles is a gentle creature, and susceptible of a high degree of cultivation; it is not so capricious in temper as other monkeys, is affectionate, and attaches itself strongly to those whom it takes a fancy to.† It is a remark-

* Leuret, *op. cit.*, pp. 536, 537.

† The Rev. J. G. Wood (*op. cit.*) gives a long account of a pet one.

A remarkable thing about the Ateles is, that its brain exhibits both the 'premier pli de passage' and the 'deuxième pli de passage' of Gratiolet—the convolutions

able circumstance, that in all the countries in which the larger apes abound, stories are told of their carrying off women, and the inhabitants believe the tales; the large baboon, the gorilla, and the chimpanzee, are all said to have carried off women to the woods. In favour of the story there is certainly this to be said, that male baboons in captivity make a great distinction between their visitors, preferring much the ladies to the gentlemen. Sometimes they are so jealous as to fall into a great passion when any particular attention is paid to a lady in their sight. This propensity was made the means of recapturing one which had escaped from its cage in the *Jardin des Plantes*. Several unsuccessful attempts had been previously made, and some of the keepers severely wounded, when one of them hit upon a plan. There was a small window at the back of the animal's cage, and as the baboon passed backwards and forwards in front of the cage, the keeper brought a young lady to the window and pretended to kiss her. This was too much, and the animal bounced into its cage in a great rage, and was secured.*

It has sometimes been said, that man alone amongst animals is able to laugh from joy or to shed tears of sorrow. And it certainly would not be well to trust to the laugh of the so-called laughing hyæna, lest a like evil befall us to that which happened to a boy who put his fingers through the animal's cage; it snapped them off, swallowed them, and then continued its rollicking laugh. But in addition to the assertion of *Le Cat*, that he has seen the chimpanzee both laugh and weep, we possess the reliable evidence of Humboldt, who says of a small American monkey:—"Its physiognomy is that of a child; the same expression of innocence, the same arch smile, the same quick passage from joy to sadness. The Indians assert that this animal weeps like a man, and the observation is very correct. The large eyes of the monkey are moistened with tears the moment it exhibits great terror or lively distress."†

There is no less a resemblance between the early emotions of the infant and those of the monkey than there is between their physiognomies, inasmuch as the first emotions of the child are of the simplest kind and of the lowest order; sensational pain and pleasure pass in the most gradual way into the emotional grief and joy which spring from personal discomfort and personal gratification. After a little while, anger, jealousy, pride, envy, and other self-feelings display themselves; in

which come to the surface in the 'external perpendicular fissure,' and bridge over the chasm in man. The second convolution is invariably absent in both the anthropoid apes, but invariably present in man; the first, Gratiolet says, is only found in man, the orang and the ateles. Dr. Rolleston has, however, shown that the first is not always apparent in men and the orang, and is sometimes present in the Chimpanzees. (See '*Nat. Hist. Review*,' No. II, art. xx.)

* *Op. cit.*, Leuret. The odd circumstance is, as some one has remarked, that the baboon should be able to distinguish the female when dressed.

† '*Aspects of Nature*.'

fact, that constitutional impulse to maintain and develop existence, which has hitherto worked unconsciously in the organic processes, now having entered into consciousness, strives in a like manner to maintain individual comfort and increase individual power. Consequently every child must at first be, and is, eminently selfish; and it is only when the organic conscious impulses, as one might designate the lower emotions, are enlightened, controlled and properly directed by a rightly developing reason, that they receive their gratification in the indirect pleasure which the happiness of others and the realisation of moral relations bestow. Cruelty might seem to be innate in the child, but it is with it really as it is with the monkey, with the lowest barbarian, or with the cat as it tortures the mouse;* while there is a positive delight in witnessing the spectacle of struggling suffering, a consciousness of the pleasing affection of self by the object, there is not, by reason of the low state of mental development, any penetrating consciousness of the condition of the not-self; confined, as yet, within the domain of self, there is no realisation by the mind of the suffering actually inflicted. The ideas which correlate the feelings of compassion, sympathy, benevolence, and other such holy states of consciousness, have not yet been developed in the mind; and it is utterly impossible, therefore, that there should be any such feelings. By the fear of punishment children are taught to abstain from acts of cruelty long before they themselves feel the horror of such acts, just as the chimpanzee is taught to avoid the sugar-basin from the same cause; but just as the chimpanzee will steal sugar if it fancies that it can do so without being found out, and will exercise much ingenuity in preventing discovery, so, likewise, children, fearful of an open indulgence in acts of cruelty, will devise stratagems for compassing a secret indulgence—not yet feeling the acts to be inherently wicked, but dreading only the danger to themselves therefrom. Whether in such inflicted suffering is implanted in the child the first germ of the sense of obligation, which in time expands into a moral sense, whether, in fact, the conscience is first derived and afterwards becomes self-sustaining, as some philosophers maintain, or whether the development of moral ideas presupposes the rudimentary existence of moral sentiment, as others hold, are not questions to be entered upon here, where all that need be said is, that whatever conclusion be arrived at with regard to mankind, must be true in a lower degree of animals, must, in fact, be applicable to developing mind in nature as well as to developing mind in individual man.†

* It is so unlike animal nature to torture the prey before killing it, for the mere pleasure of witnessing its struggling agonies, that this habit of the cat is remarkable, and seems, indeed, to indicate man's hand in the matter. A good deal might be said in favour of its being an acquired instinct—a practice first taught by man, and afterwards transmitted as an instinct.

† The disputes upon these questions seem, in some degree, to be sustained by the fac-

Even if the practical difficulties in the way of the development, by human influence, of the chimpanzee's nature were not, as they are, insuperable, but really admitted of the attempt, there is every reason to believe that it would be impossible to expand the simian type into the evolution of those higher ideas which correlate the nobler emotions. The child, on the other hand, when well-born and healthy, passes through the natural course of a deepening and widening insight to the higher mental state, and therein leaves the highest quadrumana immeasurably behind. While the destiny of man plainly is to bring himself, by development outwards, into the most intimate relations with nature—including in that term his fellow man—the monkey's nature is, and seemingly ever will be, to regard all nature solely with reference to its own personal gratification. The instinct of self-preservation, and the lowly passions which are the earliest manifestations of it in consciousness, dominate supreme in the simian nature. It is not altogether a flattering reflection for man, that he, with the perfect pattern of a divine manhood so long before his eyes, should yet be so very far from having arrived at his true relations with his fellow-man—should yet be loitering at so early a stage on the path of his destined progress.

The quick passion, the vices, the cruelties, and the other evidences of an uninformed moral sense which the young child discovers, are invariably observable also in the infantile mind of a barbarous people; and a most painful reflection, suggested by the contemplation of the great potentiality of the human type is the fearful degeneration, to which, from arrest or perversion of development, it is subject. Whenever an organism, or part of an organism with a high potentiality is arrested short of its proper development, it is less valuable, less capable of its function, less of a truth, if one might so speak, in the universe than an organism, or an organ thereof, which, though of a lower type, has arrived at its full development. This is true also of the development of mind; and something might, by the ingenious, be said in favour of placing the Roman Emperor, who made a consul of his horse, below the horse which he so ennobled. Though the undeveloped state of the human mind, as seen in the barbarians of the present day, and in the barbarous ancestors of now civilised nations, offers to our investigation emotion only of the simplest and lowest kind—little differing apparently in dignity from that of the lowest animals—yet we observe that, by reason of the higher type, it is perverted in a way which never happens amongst animals. The capability of great development is the capability of great degenera-

titious importance of certain words. Moral feeling, like every other state of consciousness, is necessarily a relation, the two elements of which are the individual and external nature. That the power comes solely from either element is evidently, then, a ridiculous supposition; but, as we know that, as a matter of fact, a rightly-developing individual does, and must, arrive at moral feeling, it is surely plain that he has the potentiality of it.—call this moral germ, or what we will.

tion; and while the bee or the beetle makes no mistakes, man's history is a history of his errors. "Have not there been whole nations," says Locke, "and those of the most civilised people, amongst whom the exposing their children and leaving them in the fields to perish by want or wild beasts, has been the practice, as little condemned or scrupled as the begetting of them. . . . And are there not places, where, at a certain age, they kill or expose their parents without any remorse at all?"* There are numerous records testifying to like things being done at the present day. Dr. Krapf tells us† that "a woman of the Wanika tribe had given birth to two children, one of which had six fingers and no nose or lips. In conformity with custom, the parents took it to the chief, who strangled and burnt it, as a Rogo or misbirth." "Twins," says Major Burton,‡ "are usually sold or exposed in the jungle, as amongst the Ibos of West Africa; and if a child cuts the two upper incisors before the lower, it is either put to death or sold to the slave-merchant." Mr. Consul Petherick thus speaks:§—"I am informed by the Neam Nams, who seemed to glory in their reputation of cannibalism, that their aged, and, indeed, all when supposed to be at the point of death, were given up to be murdered and eaten." They always feast on their fallen enemies; and if a slave runs aways, he is, if caught, invariably killed and eaten. Du Chaillu again paints harrowing pictures of the cruel tortures which are inflicted by the tribes of Equatorial Africa, under the influence of their superstition; and superstition is but one mode of perversion of the human type, of such power in its evil workings as to destroy at times the strongest instincts in nature. Even the mother's love for her offspring is annihilated thereby. Cannibalism Du Chaillu found to be a common practice, the living of one tribe being in the habit of regularly eating the dead of another. And yet, in the midst of civilisation, sprout up more disgusting, more brutal and degrading exhibitions of vice than those which darken the reputation of the barbarian; insomuch that Nero, Caligula, Heliogabulus, and men of that stamp, whose names in modern times are legion, may actually blush if, in that abode set apart as a receptacle for perverted types, they meet the savage Australian, the benighted African, the miserable Andaman Islander, or the stunted Bosjesman. For after all there is a certain passionate simplicity in

* 'On the Human Understanding,' vol. i, p. 162. Bohn's Ed.

† Op. cit., p. 193.

‡ 'Lake Regions of Central Africa,' p. 116.

§ 'Travels in Egypt and Northern Africa.'

He found a curious custom prevailing near the Equator, where women are so scarce that there was not a girl above eighteen, who was not already married or betrothed. The marriageable girl is always sold to the highest bidder, and after much wrangling, an agreement is made as to how many days in the week the marriage shall hold good. If for four days, the wife is at liberty for the remaining three to enjoy a freedom from all matrimonial obligations.

the cruelty of barbarism, an animal impulsiveness in its vice, a child-like unconsciousness of the enormity, which make the crime fall far short of the refined vice and complex brutality of the higher development. Disgust at the pitiable spectacle sometimes presented by the latter must not, however, excite us to disown the superior type, and, moved by the morbid sentimentality which, after the fashion of Rousseau, lauds the comparative simplicity of barbarism, to exalt unduly the miserable savage; to do so would surely indicate as great a want of philosophical insight as it would do to praise the animal which cannot make a mistake above the human being who makes his thousands. The question of an individual's responsibility must be kept apart from the question of his position in the general plan of nature's development.

A careful and sober consideration of the very long way which the lower races of mankind are from that which seems the destined aim and goal of human progression, and a reflection on their fundamental constitutional inability to advance for any great distance on the path of progress, may reconcile us in some measure to the disappearance of barbarous nations from off the earth. While investigating the growth and development of mind, it is impossible not to feel a sort of satisfaction as we follow its degeneration amongst barbarians into extinction; for when the change, as in them, is not upwards, it must needs be a change downwards; and in place of observing the development, there is nothing for it but to watch decay—in place of tracing the *γένεσις* of mind, we must unhappily witness the *φθορά* thereof. What wonder that a sober gladness greets a death which terminates so painful a decay! Men do, indeed, pass upwards with feet red with the blood of their fellows; for the extinction of great nations, and the failure of countless individual lives seem to be necessary dispensations in the inevitable progress. Humanity does not, it is plain, any more than the individual, burst at once into its perfect efflorescence; and in the long process of development, extending through ages and ages, nations that have failed to advance or that have succeeded in going wrong, drop off and become extinct, as the dead passions drop away from the scarred trunk of a rightly developing individual character. As the tree struggles upwards towards light and air, branch after branch dying and dropping away, so that in time a stem is raised, and the leaf-crowned head exalted above the emanations of earth into the pure regions of a clear atmosphere; so man, mortifying passion after passion, and suffering them one after another to dry and drop away, raises the scarred stem of a strong character into a healthy moral atmosphere; and so, likewise, humanity, in its progress upwards, fashions the supporting stem only by sacrificing the early branches.*

* Two centuries ago, the Indians of North America numbered about 16,000,000 or 17,000,000 souls, without including those of Mexico. The present Indian popu-

The broad reflection which reconciles us to the disappearance from the earth of barbarous nations may in some degree mitigate the pain which is inflicted by the grievous spectacle of individual mental degeneration amongst civilised peoples. In the fierce and active struggle for existence, and for a development which is sometimes not the most just, the weakest are thrown down and fall into helpless madness; but even their fall is to the profit of the mass, and general advance is obtained at the cost of infinite individual suffering. As it is manifestly the aim of mental development to bring man into intimate and harmonious relation with the rest of nature by means of a patient investigation of physical laws, and, if possible, a living realisation of moral laws, it is no marvel, indeed it appears inevitable, that those who, either from inherited weakness, or from unfortunate circumstances, have been rendered unequal to the design of existence should be ruthlessly crushed out as discords in nature. For, as in the stupendous progression of the race, whole nations drop away like dead branches from the living tree, so amongst nations, individuals decay and fall down in crowds, as the dead leaves fall from the living branch. The observation which recognises in the fall of the leaf the evidence and result of the growth of the branch, may acknowledge, in insanity, mental growth throwing off decaying reason, and therein revealing its own life. That insanity is a comparatively rare affliction amongst barbarous nations may then be the result of their undeveloped state; and although it may probably become rare, or perhaps altogether disappear on the advent of a *true* civilisation, yet in the present condition of nations that are deemed to be advancing the frequency of its occurrence is scarcely a matter for wonder. When the relations are multiplied, the chances of disorder are increased, and where the struggle is hardest, and help is not at hand, more of the feeble must suffer.

From the general tenour of the foregoing observations with regard to the development of mind, it might be anticipated that in the degeneration of the highest intelligence there would appear to be a reversion to the lower form of human intelligence, or even sometimes to the type of animal mental development. It is necessary here, however, to distinguish between the idiocy which is produced by arrest of development and the insanity which has occurred in a full-grown brain, with a fairly developed mind; in the former case we do sometimes discover an approximation to the lower types, or rather to the general plan from which all the special types deviate, while in the latter we see only a higher type marred, pain-

lation is estimated by the Abbé Domenech ('Seven years' Residence in North America') at 2,000,000.

In the last report issued by the Colonial-office on the past and present state of our colonies, an account is given of fourteen persons, all adults, aborigines of Tasmania, who are the sole surviving remnant of ten tribes.

fully exhibiting its higher features in the character of its degradation. Malacarne professes to have counted the laminæ of the cerebellum, and to have found them to be less numerous in idiots than in men of intelligence. Now these laminæ are less numerous in the chimpanzee and in the orang than in man, and markedly fewer in other monkeys; so that there is, so far, an approximation by some idiots to the monkey type.* Again, a character in which the monkey's brain differs from that of man, is that the under surface of the anterior lobes in the monkey is excavated in consequence of the convexity of the orbital arches. Gratiolet has found this character well marked in a microcephalic idiot, aged seven, although when the smallness of the head is extreme, the smallness of the frontal lobes renders the excavation less apparent. The simplicity and the symmetrical disposition of the convolutions, which also distinguish the brain of the quadrumana from that of man, are sometimes observed in small-headed idiots; they have been noted also in the brain of the Bosjeswoman and in that of the Hottentot Venus. In fact, as Dr. Rolleston observes, in the lower species of apes, and in the lower varieties of man, simplicity and uniformity are the rule, while in the higher species of apes, and in the higher varieties of the species, man, variability is the rule, and uniformity the exception. Though in the conformity by some idiots to the simian disposition of the convolutions, there may be an arrest of cerebral development at an animal stage, yet it would be by no means correct to suppose that in all cases of microcephalic idiots the atrophied hemispheres have the foetal form. And, indeed, if the most recent observations on the development of the convolutions in the foetal months, are to be trusted, we must acknowledge that even though the hemispheres have a foetal character they must still differ greatly from the simian form. Gratiolet, after attentively comparing the brain of monkeys with that of men, has found that though in adult age the arrangement of the cerebral folds is the same, and that, therefore, if we were to stop here, there would be no sufficient ground for separating man from animals in general, yet "the study of development calls for an absolute distinction."† While the temporo-sphenoidal convolutions appear first in the brains of monkeys, and those of the frontal lobe afterwards, precisely the reverse takes place in man—the frontal convolutions appearing first, and the

* Gratiolet remarks that Malacarne must have examined congenital idiots; for the laminæ are less numerous in the foetus than in the new-born infant, and less so in the latter than in the adult; they increase up to a certain age, and, therefore, if development be arrested, they will be less numerous. (Op. cit., p. 90.)

Paget mentions an idiot's brain, in which there was complete arrest of development at fifth month of foetal life: there were no posterior lobes, and the cerebellum was only half covered. 'Lectures on Surgical Pathology,' p. 3.

† In a paper read before the 'Société d'Anthropologie' lately. It is evident that on this subject we may expect, ere long, some important information from Gratiolet, who has already done so much for cerebral anatomy.

temporo-sphenoidal afterwards ; so that "no arrest in the progress of development could possibly render the human brain more like that of monkeys than it is at adult age ; far from that, it would differ the more the less it was developed."

When we find, however, from observation, that a human being may, from an arrest of cerebral development, be destined to pass through life with a brain so imperfect as to be little better than that of some animal, we do not anticipate any higher manifestation of intelligence in him than is observed in the animal. But as a matter of fact, some idiots have brains that are fully formed, and to all appearance want nothing in development, and yet are much inferior to the brutes in intelligence. Some of them have no language whatever, cannot move, seem insensible to pain, are not able to take or chew their own food, are destitute even of the instincts of self-preservation and propagation, and much more of any sentiment of morality ; they are capable only, in fact, of the organic functions, and seem to belong more to vegetable than to animal life, though they want even the struggle for existence which every vegetable has. In these cases it may well be remembered, as has been before said, that the functional development of the brain, as the organ by which man is brought into relation with external nature, only takes place very gradually after birth, and that it may, therefore, be quite possible that some unfortunate cause may produce an arrest of development immediately after birth as well as a few months before that event. As it is universally acknowledged that there is a great difference between the nervous force of different people, independently of any difference in size of the nervous mass, it is readily conceivable that the completely formed brain may lack force—may be deficient in, or almost destitute of, that nervous energy by which it is rendered capable of responding to the force around it. The organic constructive force which at times performs such strange freaks in the womb—as for instance, when it forms well the whole of the foetal organism with the exception of the brain, seemingly forgetting that organ, or more likely not having the energy necessary to produce it—may well be supposed to exhaust itself sometimes in the development of the nervous substance, and to have no force left for the endowment of it with the nervous power essential to its developmental progress in the new and trying relations of its life in the "womb of time." "It is not sufficient," as Dr. Buchez remarks, "that man be engendered carnally in order to be perfect ; he must be engendered spiritually also."

From the vegetative idiocy we might pass through every degree of lessening imbecility up to ordinary human intelligence, and trace a progress very like that which has already been displayed in the development of animal intelligence. In such an occupation, it would be remarkable how plainly at times there crop out in the degenerate type of mankind traces of the animal. Pinel published

the case of an idiot, who was something like a sheep, both in respect to her tastes, her mode of life, and the form of her head. "She had an aversion to meat, but ate fruit and vegetables greedily, and drank nothing but water. Her demonstrations of sensibility, joy or trouble were confined to the repetition of the ill-articulated words 'be, ma, bah;' she alternately bent and raised her head and rubbed herself against the belly of the girl who attended her; if she wanted to resist or express her discontent, she tried to butt with the crown of her head; she was very passionate. Her back, her loins and shoulders were covered with flexible and blackish hairs, one or two inches long. She never could be made to sit on a chair or bench, even when at meals—as soon as she was placed in a sitting posture, she glided on the floor; she slept on the floor in the posture of animals."* "One of our pupils," says Dr. Howe, "besides all the marks just mentioned, which give him a strong likeness to the monkey, has, moreover, the long arms of the ape; he moves about with his head and shoulders stooping, and his arms hanging forward, as though he were going to drop on all fours. One of his pleasures is to climb upon a desk or high place, and leap through the air with outstretched limbs upon some one's neck and to cling round him, not as a common child does with his arms alone, but twining his legs about him, as though he were one of the quadrumana."† An idiot sometimes ruminates like a cow, bringing up his food and masticating it a second time; another howls when he is hungry, does not eat, but swallows his food, and licks up the crumbs like a dog; when he wishes to recognise any one he begins by smelling at him, as, according to Humboldt, the Peruvian Indians distinguish in the night the different races by their quick sense of smell.

A curious instance of the manifestation, or, as some would say, of the resurrection of an animal instinct, was afforded by an idiot woman who was great with child by some miscreant; as no assistance was at hand at the time of her delivery, she gnawed through the umbilical cord as the beasts do. Major Burton tells us that among the East Africans the child is carried on the back, a sheet or skin being passed round it, and that "even in infancy it clings like a young simiad." The native Australian female, who is perhaps the lowest of womankind, carries her child similarly suspended, and throws her elongated pendulous breasts over her shoulder for it to suck, and, kangaroo-like, perhaps to hold by.‡

* Esquirol, 'Des Maladies Mentales.'

† 'Report on the Causes of Idiocy.'

‡ The inferior races, in other points of structure besides that of their brains, exhibit approaches towards the monkey type. In the chimpanzee the parietal and sphenoidal bones are prevented from coming in contact by an intervening projection of the temporal bone. Many negro skulls have been observed by Owen to have the same conformation, whereas in the Caucasian, the sphenoidal and parietal bones are in contact for about half an inch. Again, the middle turbinate bones in negroes form large globular protuberances in the nose, whereby the surface of the olfactory membrane is much increased, and the African, like the brute, has an acute smell. In the ape the

In the degeneration which takes place if a higher race of men be badly fed, badly clothed and housed for a generation or two, there is, according to some, an undoubted approximation to the monkey type of figure. Whether this be so or not, there can be no doubt that when men are well fed, and well clothed, and their intellects systematically cultivated, their looks become more lofty and noble, and they pass farther and farther away from the monkey type. The true development of conscious mind and the degradation of it, are both alike faithfully reflected in the action of the unconscious organic force. About 200 years ago a number of people were driven by a barbarous policy from the counties of Antrim and Down in Ireland towards the sea-coast, where they have ever since been settled, but in most miserable circumstances, even for Irishmen. The consequence has been that their features are repulsive, their jaws project, their mouths are large, their noses depressed, their cheek-bones high, their legs bowed, and their stature extremely diminutive. "These, with an abnormal slenderness of the limbs, are the outward marks of a low and barbarous condition all over the world; it is particularly seen in the Australian aborigines."* Again, the Cagots were a class of men found scattered along the coast of France from the north to the south; they were sunk in the deepest poverty and abasement, and treated with the greatest contempt and abuse. In the eleventh century they were bequeathed and sold as slaves, and although just admitted to be human beings they were compelled to enter a church, being reputed leprous, through a small door specially made for them, to have special seats and a special holy-water font.† This utter moral and intellectual abasement was truly reflected in the miserable physical degradation which threatened almost to bridge over the chasm between man and the animals. Happily for mortals, however remarkable may be the animal characteristics of their extreme degradation, nature seems to have made sure provision for the speedy extinction of the degenerate results; for she puts the ban of sterility on the morbid type, and thus, in place of reverting to an animal type which might be fertile, plainly manifests the design of extinguishing human degeneration.‡

bicuspid is planted with three fangs; in the Caucasian there is but one fang, which is, however, formed by two being united; in the negroes, the two fangs are distinct. Concerning other interesting points in this approximation, reference may be made to White ('On the Regular Gradation') from whom Lawrence ('Lectures on Man') has profited. White was, however, clearly far too eager to approximate man to the monkey; for he distinctly asserted that "the orang-outang has the person, the manner, and the actions of man"—in such opinion being confirmed by Lord Monboddo, who maintained that "the orang-outangs are proved to be of our species by marks of humanity that are incontestible."

* 'Vestiges of Creation.'

† Esquirol, *op. cit.*

‡ This consideration may be regarded as militating against the supposition of any descent by man from the monkeys. For if by the operation of favorable external conditions, man has been brought to his present level, why should he not, by the operation of unfavorable conditions, go back to the monkey's level?

As idiocy, when not congenital, is an arrest in the functional development of the brain at an early period, and as we have already seen that the intelligence of early infancy differs from that of the animals, not in what it actually is, but in what it potentially may be, it is evident that an early arrest in the development of human intelligence may correspond somewhat closely to the complete development of an animal's intelligence. Accordingly some idiots are like certain humble animals, while many more—the great majority of them—psychologically resemble the monkeys. And this monkey-like character of idiotic intelligence will not seem altogether unaccountable, if we remember that one cause of idiocy in a human brain rightly developed at birth, has been supposed to be a want of nervous force; the want, in fact, of that higher potentiality whereby, under suitable conditions, it expands into its special functions, such force as may be available in this deficiency carrying the functional development no higher than the monkey's level. It is the custom of idiots to use such powers of intellect as they have for the gratification of their passions, and to that purpose they will at times display intelligence of which they would not have been supposed capable—will even, now and then, make advantageous use of their simplicity in order the better to deceive. Their reason, monkey-like, works entirely within the circle of self, and the defective mind cannot rise to the height of those higher emotions which are the expressions of a conception of moral relations. The abnormal state of a superior organ brings it to the level of the normal state of a corresponding inferior organ. Charlot, “un simple d'esprit,” amongst other occupations, is crossbearer at the funerals at the Asylum, and receives on each occasion an allowance of tobacco for his work. Well, when he hears the passing bell he dances with delight; if he knows that some one is dying he roams about restlessly, impatiently counting the minutes of the sufferer's agony; and if he can manage to slip unobserved to the bedside, he will reproach him bitterly for not dying fast enough.”* Charlot was plainly rather a superior idiot, but he may still be regarded as a type of that low order of intelligence which concerns itself solely with the modifications of self; for although it is true that all intelligence first arises in such modification, yet it attains development only by attention to the causes thereof; that is, by the investigation of the relations of the not-self. Sensation is at first pure self-consciousness, but perception advances out of it in the development of world-consciousness; and, in like manner, in a higher sphere the lowest intelligence is occupied with the subjective affection, while the higher intelligence labours to bring the individual into the closest possible relations with the objective,

An examination of the stories told of wild men, as of Peter the Wild Boy, and of the young savage of Aveyron, proves that they were cases of defective organization—really, therefore, ‘pathological specimens,’ as Lawrence observes.

* Morel, ‘*Etudes Cliniques sur les Maladies Mentales*.’

and, by a wide insight into his fellowship therewith, to subordinate the misleading self-feelings to those higher feelings which spring from the recognition of himself as a part of nature, fulfilling the end and purpose of existence in advancing the general good. As in the early perception there is the revelation of a self and a not-self, so in an early stage of a truly developing intelligence there is the revelation of a moral self and of moral relations.

In the painful and humiliating spectacle of human degeneration which is witnessed in the breaking down into madness of a mind seemingly well-developed, there is no such approach to the animal type as is occasionally exhibited by congenital idiots. The mighty are pulled down, but the might is manifest even in the wreck. And as the ruins of imperial Rome are more solemn, mournful, awe-inspiring, than those of the Indian wigwam village, or as the bare branches of the dying oak, outstretched as in bald rugged agony and mute reproachful entreaty towards heaven, are more deeply impressive than the dropping petals and fading leaves of the rose-tree, for which it seems only natural to die; so the spectacle of the man of great intelligence falling down mad in the joyous activity of busy life is infinitely more sorrowful than that offered by the congenital idiot, or, perhaps, even that presented by the decaying nation of barbarians. But, as has been before said, the capability of development is the capability of degeneration, and the superiority of type is proclaimed in the extent and variety of perversion to which it is subject. As the human body, by virtue of its great specialization of parts and delicacy of organization, is more liable to disease and subject to many more diseases than the animal body, so likewise the human mind, being so far exalted in its just development above the animal mind, is, by reason thereof, subject to the possibility of a much greater degradation. Even the madness of man, then, declares his superiority. But such is the benevolent purpose of nature that no efforts whatsoever can perpetuate a morbid human type; for although the offspring of degenerate parents is a further degeneration, the evil soon corrects itself; and, long before man has descended to the animal level, there comes an incapability of producing offspring, and the morbid type dies out. Insanity, of what form soever, whether mania, melancholia, moral insanity, or dementia, is but a step in the descent towards sterile idiocy, as may be experimentally proved by the union of mentally unsound individuals for a generation or two. Morel relates the history of one family, which may be shortly summed up thus:

First generation.—Immorality. Alcoholic excess. Moral brutishness.

Second generation.—Hereditary drunkenness. Maniacal attacks. General paralysis.

Third generation.—Sobriety. Hypochondria. Lypemania. Systematic delirium. Homicidal tendencies.

Fourth generation.—Feeble intelligence. Stupidity. First attack of mania at sixteen. Transition to complete idiocy; and probable extinction of the race.*

Not only, however, does idiocy die out, but—additional blessing—it dies out soon. According to the best estimate that could be made by the American commissioners, the average duration of life amongst congenital idiots is not more than twelve years. And Dr. Howe adds:—"Idiots of the lowest class perish in great numbers in infancy and childhood; fools last longer, and simpletons attain to nearly the ordinary longevity. Perhaps it is safe to say, that the ordinary longevity of the lowest class of idiots is not more than six years."†

It is almost impossible to avoid expressing a grateful admiration of the wise, sure, and merciful provision of nature by which degenerate mind is so quickly blotted out. The complete absence in some idiots of the instinct which is so powerful in all animals, the instinct of propagation, and its futility when present in others, are certainly facts of deep significance in the economy of nature. Though the instinct impels the lower animals blindly to the accomplishment of acts necessary for the continuation of the species, its sphere of action is not limited by so lowly a function in man. As a mere animal impulse, prompting the continuation of the kind, it still moves the individual to that which shall result in the propagation, at any rate of his influence, and in part also of his individuality, through time. We find, however, that instincts, which work only unconsciously in the lower animals, enter into consciousness in man, and, thus illuminated, manifestly acquire a nobler development and a larger circle of action. The self-conservative impulse becomes in consciousness that self-feeling which lies at the bottom of all our emotions and, indeed, of conscious individuality; and, in like manner, the propagative impulse, in consciousness, not only makes the individual acquainted with its sexual design, but prompts the highest intellectual action for the continuation of his influence through time. It is by its power that man consciously labours for the future, that day after day, even when sinking into the grave, he irresistibly believes in a future, that he lays up stores which his

* Op. cit.; also, '*Traité des Dégénérescences physiques intellectuelles et morales de l'espèce humaine, et des causes qui produisent ces variétés malades.*' Catherine de Médicis amused herself with making marriages between dwarfs; they were always sterile. Giants are commonly impotent, and both giants and dwarfs ordinarily die early, according to J. G. St. Hilaire. '*Hist. des Anom. de l'Org.*'

The French psychologists, who have just reported on Gheel, state, as I am informed by Dr. Bucknill, that in all the pregnancies of lunatics there the male parent has always been sane.

† 'Report on the Causes of Idiocy.'

The various monsters that are formed by the greater or less union of two fœtuses generally die soon after birth, even when no cause is apparent why they should do so. Nature clearly does away with them to preserve the genuine figure of human frames.

reason assures him he will never himself enjoy; that he aspires to leave a name in the world's history; it forces even the most selfish, to some extent, out of the small circle of individual selfishness, even if it be only into the little larger circle of family selfishness; and it seemingly lies at the foundation of that instinctive belief in immortality which some uphold, that every nation, however barbarous, more or less distinctly has. Some might wish to describe it as but a particular manifestation of the self-conservative instinct; and such a description would be just enough in the philosophy which regards the best moral action as, what in the long run it surely is, the highest selfishness. Man, must, however, plainly first gain the force, be selfish in acquiring, before he can use it, become moral in applying. And, regarding the purpose of the propagative instinct, and its late effective appearance in individual development, we appear necessitated to conclude that its aim, when fully developed in consciousness, is rather to control the feeling of self, and to expand the power of self in a wider diffusion. It may be described as the impulse of mind to continue and develop in nature, active and energetic while man is advancing, but contracting more and more the circle of its action as he degenerates, until it is reduced to its primitive condition of a mere animal impulse for propagation, which in mankind is the idiotic stage immediately preceding its final extinction.

The physical degeneration of a sexual impotency is surely reflected in a corresponding moral degradation. It plainly is not the purpose of nature to extinguish the animal in man, but rather to exalt it, to ennoble it and develop it in the moral and intellectual; insomuch that, whenever by nature or art, man is deprived of the power of propagation, he becomes a degenerate being, whose career ends in desperate vice, or in madness, or in suicide. The perfect moral man must be of perfect physical development. Eunuchs are said to be the vilest creatures of the human race, cowards, deceitful, envious, and vicious. "Castrated persons have many defects which are peculiar to them; they have a bad odour, a yellow colour, furrowed cheeks, and feminine voice; they are unsociable, deceitful, and rascally, and are never known to practise any human virtue."* Black eunuchs, according to J. S. Beauvoisins, are brutal animals, and live like wild boars in their lairs. "These ferocious animals seem to think that they may do what they please, and are ready to sabre those who do not get out of their way."† Even those who, in civi-

* 'Cours d'Opérations,' par Dionis.

† "On sait que les eunuques sont, en général, la classe la plus vile de l'espèce humaine; lâches et fourbes, parcequ'ils sont faibles; envieux et méchants, parcequ'ils sont malheureux."—'Rapports du Physique et du Morale de l'Homme,' p. 322, by P. J. G. Cabanis,

It may be said that there have been instances of eunuchs, as during the decline of the Roman Empire, who have been remarkable for great intellectual power; but the objection does not much affect the opinion with regard to the propagative in-

lised life, though not wanting power, are yet prevented by the unfortunate circumstances of an artificial mode of living from the natural and complete development of the procreative instinct, in the happy feelings of affection and the unselfish activity which flow from the results of its legitimate exercise, fall oftentimes into an unhealthy state of mind; and it might be soberly argued that much vice, crime, and madness, are attributable to that cause. Nevertheless, when such unhappy consequences follow, though in some measure a reproach, it must not be deemed an unmitigated reproach to civilisation; for they clearly happen, not because there is no refuge from an apparent evil, but because, from ignorance or a self-indulgent indolence or a constitutional weakness, the right remedy is not used, because the ever-prompting instinct is not consciously directed in the moral and intellectual sphere to some aim of general usefulness, which might afford a vicarious satisfaction to its blind longing.

As, notwithstanding the painful sufferings and trials which experience proves to him make up the most of his life, man clings closely to existence by reason of the powerful instinct of self-preservation, so he is impelled by the instinct of propagation to continue his kind, notwithstanding the miseries which he well knows must ever befall it, and to labour patiently for the future, notwithstanding the knowledge of so much profitless labour, and so little real advance, through the many ages of the past. But, happily, there is some gleam of encouragement; for, however slow the progress, all observation proves that mankind is advancing. The beings of the present civilisation are evidently superior to those of any past civilisation, and the beings who now make barbarism appear to be disappearing from the earth. The researches of modern science have, too, established sufficient grounds for the assumption that man coexisted with the animals found in the diluvium, and that many a barbarous race may have disappeared, before historical time, with the animals of the ancient world, "whilst the races whose organization is improved have continued the genus."* The various fragments of human crania, with the circumstances under which they were found, and especially the discovery of his works—as the flint implements are supposed to be—certainly supply strong arguments for maintaining the geological antiquity of man. The Neanderthal fragment of cranium and the skulls found in several parts of Germany, with the extraordinary prominence of their superciliary ridges

instinct; for (1) it is the moral development that is most affected by the physical degradation from which eunuchs suffer; and (2) it is known that eunuchs sometimes have the instinct, and vainly attempt what they have not the power to perform.

* See Prof. Schaafhausen on the 'Crania of the most Ancient Races of Man,' in Art. xvii, No. 2. 'Natural History Review,' from 'Müller's Archives,' 1858.

and their exceeding narrow and low foreheads, approach nearer to the monkey type than the crania of the lowest surviving human race.* And the conclusions which the Abbé Frere drew from his large collection of crania were, that the capacity of the skull had increased in modern times, and that while in the most ancient races the occipital was the most, and the frontal region the least developed, "the increase in the elevation of the latter marked the transition from barbarous to civilised man."† So that, although we have not the positive evidence of the brain itself, we have sufficiently strong evidence, in the character of the cranium, that the races of primeval times were inferior even to the lowest existing race; and the records of the past, as well as the observations of the present, fairly entitle us to uphold a gentle progression in the physical development of mankind.

An important consideration presents itself as to the way in which the material improvement functionally expresses itself. Can we truly recognise a general growth of mind, a widening of the thoughts of men, through the ages? That the cerebral development has plainly declared itself in intellectual progress, will scarcely admit of question. The general store of knowledge is increased upon the earth, and each individual is much wiser than his remote progenitor. And yet, with great intellectual development, there has been something wanting; for, although there have been many nations that have attained to great knowledge, yet they have one after another gone the way of destruction—mind has advanced to a lofty height only to suffer a greater fall. It needs not any deep scrutiny of the histories of the departed nations to show that they lacked one thing, and that, a faithful and practical recognition of the moral laws of the universe. A learned writer of the present day, who has travelled over nearly all the world—over whose head the great Niagara has dashed, who has "spent months amongst the Trappers in the bush;" who has "smoked the pipe of peace with the Austral savages in the prairies, and with the polished Arabs on the plains of Palestine;" who has "fought with the savages, and discoursed with the high priest of Mecca;" who has "seen tempests on the Pacific, and tornados on the plain;" who has done battle with the tiger and the wild boar, and could show scars that he has not escaped

* Prof. Busk observes of these skulls, that they do not belong to the brachycephalic type, and cannot, therefore, be referred to the short-headed race or races which, there is much reason to believe, constituted the earliest of the existing European stocks.'

† Quoted in 'Nat. Hist. Review.'

Dr. Pritchard's comparison of the skulls of the same nation at different times in its history led him to the conclusion that the present inhabitants of Britain, "either as the result of many ages of greater intellectual cultivation, or from some other cause, have, as I am persuaded, much more capacious brain-cases than their forefathers." ('Physical History of Mankind,' vol. i, p. 305.)

scathless," states briefly the results of his inquiries and observations thus : "In every part of the globe I found the "many" degraded and miserable ; and the "few" miserable and luxurious. On the one hand ignorance and servility ; on the other, cunning, rapacity, and power." True of the present, this is yet more true of the past ; and the ghost of many a departed nation might well utter to the nation of to-day the solemn warning of the fallen Wolsey :

Mark but my fall, and that that ruined me.

Of small avail was the mystical knowledge of the Brahmin, who has made, perhaps, greater efforts than any other mortal to comprehend the incomprehensible, when it revealed not to him that the Sudras was of equal dignity with himself in creation. Little good was there in the wonderful science of the Egyptians, which disdained not to build such gigantic follies as the pyramids by the compulsory labour, and at the cost of the lives, of thousands upon thousands of slaves. Grecian intellect still works notably in the present day ; but neither Grecian intellect nor Grecian art could save Greece from decay. Those who poisoned Socrates, when through him wisdom raised her voice in the streets of Athens, were plainly not going the wise way to life, but the foolish way to death.

The Roman Empire, so great in the false greatness of military glory, was some 1250 years from the time of Romulus in growing and in dying ; but it has long since gone. In the year 476 or 479 after Christ, the last emperor, Romulus Augustus, contemptibly called Augustulus, disappeared, and Odoacer, a barbarian, reigned over Rome. The senate then, in their own and the people's name, consented that the seat of the empire, which had ignorantly devoted its power to destruction, should be transferred from Rome to Constantinople, where, in the fullness of time, the Saracens gave an account of it. Constantine Paleologus there bravely met the Turks in the breach, and perished amidst the ruins of a dynasty and empire, which he was unable to save. His self-immolation availed nothing, and for 400 years the crescent has been planted on the cathedral of St. Sophia. That which now constitutes the greatness of Britain, at one time constituted the greatness of Tyre, whose "proud piers lie scattered in the main" ; and though the piers of England may yet be sound, and her wooden walls untainted by decay, it may be well, before making an example of England, to remember that the battle of Hastings was only fought some 800 years ago, and that 800 years is not a long period in the history of a nation, and is a very short period in the history of the world.

It may be that the nation, like the individual, has a term assigned by nature to its existence, and that, how carefully attentive soever it may be to the physical and moral laws, it must still after a time decay and die. It is plain, however, that the experiment has never yet been fairly made ; for though there have been in most nations certain

wise and virtuous men, who have sincerely acknowledged and faithfully proclaimed the vital importance of obedience to the moral laws of nature, and have often died sacrifices to their convictions; yet the mass has ever been, as the deaths of the prophets prove, ignorant, savage, and degraded. And of what avail is the progress of the individual if the whole nation remains hopelessly behind? It is true that we, looking back from our vantage ground on history, may be able to assign the individual his due position in the plan of the development of mind—may be able to trace the progress of mind through him in a stagnant nation, as on the surface of still water we recognise the motion of the undulation when the water itself makes no progress. Nevertheless, it is a deeply gloomy and unsatisfactory supposition that this must ever be the method of progress; and when we reflect that moral principles are not merely intellectual speculations, but actual laws of nature, as certain and uniform in their operations as are the physical laws, there is every reason to anticipate that as the recognition of the physical laws has added so greatly to the power and comfort of mankind, so the practical realisation of the moral laws in the conduct of life will increase the happiness, advance the mental development, and, perhaps, insure the stability of nations.*

That which appears to have been so fatally wanting amongst the nations that have passed away, is none the less a fatal want in the individual who lacks it. To say the best of him who has failed intellectually and morally to develop, or who has degenerated, is to say that the world is no better by his existence. He has eaten, has drunk, has slept, has propagated, and died; and if any advance is to come out of him, it is left for his posterity to make under the inherited difficulties of his deficiencies. The natural course of a just

* It is not always easy to understand what ideas some philosophers wish us to have with respect to the relation of the physical and moral laws in the universe. Dr. Whewell, whose writings it would be almost presumption to praise here, says that physical laws are laws according to which things *are* and *events* occur; but moral laws are laws according to which actions *ought* to be. And are not physical laws really laws according to which men *ought* to act, if they wish to act successfully? A man may break his neck easily if he chooses to ignore the existence of a law of gravitation, and so such or a like event may *be*. And similarly, also, by ignoring the existence of moral law an individual comes to a certain punishment; and pain, disease, suffering, remorse, in himself and in his posterity, *are* events flowing from the infraction of moral law. The greater influence of the human will in determining events under the moral laws than under the physical laws does not establish any essential distinction, in the mode of action of the former, in nature; for the human will, however free it may be called in its own sphere, is clearly contained in the wider sphere of nature, and acts according to laws which are derivative from the more general laws of nature. It appears, indeed, that the physical and moral laws are so correlated, that the action of one plainly revenges the infraction of the other. When, therefore, Dr. Whewell speaks of the attainment of a knowledge of nature as the '*Idealisation of facts*,' and uses the '*realisation of moral Ideas*' to express the constant progress of humanity, we are prone to attribute the seemingly untenable distinction to that bias which leads him to underrate, and so painfully to fail in doing justice to, Locke.

mental evolution is to fashion, in the highest moral sphere, a powerful will out of that fundamental reaction which we trace upwards in organic action, in reflex action, in consensual action, and in emotional impulse. And if it be said, that every one will in the end, philosophy notwithstanding, act according to the dominant feeling, or, in other words, according to the strongest motive, the reply is that the nature of the dominant feeling will be determined by the condition of intellectual development. That which in one of little knowledge or limited perception produces a pleasurable feeling, and is provocative of a certain action, will in another, who discerns the moral relations of it, produce a painful feeling, and excite quite a different action; and, again, objects which in an undeveloped mental state are painful, may in the developed mind, alive to all their relations, produce pleasure, and action in accordance with such dominant feeling. It is plain, then, that men should rightly be able to give a reason for the faith that is in them, even for the faith in their feelings; and it is quite as necessary for proper mental action that there should be a co-ordination of the emotions, as it is that there should be a co-ordination of the movements of muscles for proper physical action. Insanity is often plainly traceable as the natural termination of mental action that is not upwards; and like as individuals suffering from certain bodily disease, as chorea, are unable to control the incoherent muscles to a desired aim, and have been said to suffer from muscular insanity; so certain of the insane are afflicted, from want of will force, with an inability to co-ordinate their feelings, and might be said to suffer from convulsed and incoherent feelings. Besides acquiring a knowledge of the physical laws and power thereby over external nature, it is evidently necessary that man should obtain a knowledge of the laws of mental development and power over his own nature. Any individual development which is not in that direction, however fashionable it may be, is as false as that of the departed nation, and will not conduct to those high mental conceptions which correlate the sincere and vivid convictions of the highest moral feeling.

It may be said by those who are sceptical with regard to human progress—and it is sometimes said in the way of scornful reproach—that the principles of morality have been the same from the beginning of the world, and as well known to mankind through all its history as they are at the present day.* There has ever been a wise

* Buckle's 'History of Civilisation.'

"La morale de toutes les nations a été la même." (Condorcet.)

"In der Morale-philosophie sind wir nicht weiter gekommen, als die Alten." (Kant.)

"Morality admits no discoveries. . . . More than 3000 years have elapsed since the composition of the Pentateuch; and let any man, if he is able, say in what important respect the rule of life has varied since that period. Let the institutes of science be explored with the same view—we shall arrive at the same conclusion. Let the books of false religion be opened;—it will be found that their moral system is, in all its grand features, the same," &c. (Sir J. Mackintosh.)

and virtuous minority, which has always been swallowed up in the foolish and wicked majority. Meanwhile, it may be said, as men are thus coming and going, nature's changes go steadily on. The mountains are day by day disintegrated; the peak we see "shedding its flakes of granite on all its sides, as a fading rose lets fall its leaves;" and everything seems to indicate that a gradual and destructive change is taking place, which must sometime render the earth unfit to be the dwelling-place of man. Have we any reason, then, to believe that the good will overtake the evil before the end comes? What evidence is there that man will not be swept away as an animal incapable of advance beyond the narrow limits of his present development; while the lives and works of the virtuous minority, and the achievements of science, remain only to mark his aspirations, as certain rudimentary organs in some animals indicate their efforts after a higher organization, and are prophetic of a higher species? When the "everlasting hills" are decaying, and the fountains of the solid earth are unsure, is it not possible that the race of man may be swept away, and the wreck thereof remain to mark a geological stratum, and to build the foundation of a millennium of higher beings? Nevertheless there are some reasons why we should reject such a sorrowful and scornful philosophy.

Our investigation of the development of mind has shown that the natural course thereof is to bring the individual to those conceptions of his relations in nature which, viewed on the intellectual side, are the highest generalisations concerning the physical phenomena of nature, and which, on the moral side, are truly cognitions of the moral course of nature. Man has relations to the universe of matter, which he labours to discover, and since Bacon's time has been successfully discovering; but he has relations also to the universe of souls, which he must likewise labour to discover. Moral cognition is, then, an end to be attained in the natural course of a truly advancing mental development. And if the human race is not doomed to degenerate and perish, but is destined to develope and abide, it is to be presumed that not a favoured few only, but the whole race, must necessarily develope into the high state of moral cognition. It behoves us not to be impatient, because the result seems still so far distant, but rather, calmly reflecting that "centuries are but seconds in the great process of the development of advancing humanity," patiently to hope for this realisation of our moral ideal.*

We are not without evidence that the race is progressing in moral improvement. Looking at the facts as they are, it seems impossible

* "In what condition do I leave the world," writes Humboldt in 1853, "I who remember 1789, and have shared in its emotions? However, centuries are but seconds in the great process of the development of advancing humanity. Yet the rising curve has small bendings in it, and it is very inconvenient to find oneself in such a segment of its descending portion." (Letters to Varnhagen von Ense.)

to deny that the civilisation of to-day is greatly superior, in its practical morality, to the moral condition of the world at any other period; and regarding the very intimate relations which exist between the physical and moral laws of the universe, it is certainly impossible to believe that the great intellectual development which is taking place in mankind will not be faithfully and clearly echoed in moral advancement. Since man has quite recently devoted himself to the only method of gaining true knowledge by a patient investigation of the laws of nature, he has acquired the power of controlling and using for his purposes those natural forces before which in his infancy he fell prostrate in deepest terror and veneration. Unmindful of Neptune's anger, he now rides safely over the fury that at one time overwhelmed him, and guides with quiet confidence his frail vessel through the ocean's lashing rage to a sure haven; he skims with wondrous speed the rugged surface of the earth; and even directs to his humblest purposes that terrible lightning-force before which he once grovelled in uttermost helplessness and abasement. And is there not great moral progress in this improved attitude? Save in certain baroarious parts, men no longer now build altars to appease the fury of the hurricane, or offer sacrifices to propitiate the anger of the pestilence; for they have discovered that both hurricane and pestilence pursue their devastating courses in accordance with fixed, unchanging laws. In place, then, of the miserable superstition, praying to nature, there is the intellectual effort to bring human life into harmony with nature; in place of degeneration and destruction from ignorance of, and disobedience to, the physical laws, there are development and salvation from knowledge of, and obedience to, them. But it is simply impossible that man should place himself in faithful obedience to the physical laws without bringing himself more or less plainly into subjection to the moral laws; he clearly cannot bring himself into complete harmony with a part of nature but by bringing himself into harmony with the whole of nature.* Since he has acquired a knowledge of the laws by which certain diseases come, he has endeavoured to prevent them; but as the individual cannot do that for himself without doing it at the same time for others, he must, were it necessary, even without merit of his own, be made moral. But it is not required of him to do good on compulsion; for as soon as ever men have attained to a sincere, intellectual recognition of the causes and laws of events, there inevitably springs up the correlative moral cognition—the intellectual cognition of their duties with regard to the events. Accordingly, we observe that, with advancing intellectual development, great efforts are being made by the favoured few to improve the condition of the poverty-stricken many—by attention to sanitary principles to improve their physical state, and by education to make them wiser, happier, and

* Denn wo Natur in reinen Kreise waltet
Ergreifen alle Welten sich.

(‘Faust,’ p. 367.)

better. It has been made manifest, too, that it is cheaper and more philosophical to prevent crime than to punish it, and so reformatories and ragged schools are taking their places in establishing that empire of love which is to cast out hate. When we reflect on how great a part of the vice, crime, and disease amongst mankind is palpably produced by disobedience to the physical laws of nature, it seems impossible that, when men were in complete ignorance of these laws, they should have successfully carried into effect the principles of morality.* And it may fairly be supposed that systems of morality, of unquestionable excellence in themselves, have failed adequately to influence the mass, solely from the impossibility of an intellectual recognition of them by the mass—an impossibility which was mainly, of course, owing to the low state of mental development, but which may in part also be attributed to the method by which truths, which should have been made intellectual convictions, were dogmatically enforced as maxims not to be inquired into or questioned, although inquiry and questioning could only have added to their certainty. Now, however, in the intellectual development which results from observation of the causes and laws of events in the physical and moral world, we have a certain guarantee of moral progress. And this should teach us how fearful a thing it would have been if the principles of morality had not been the same from the beginning; forasmuch as mankind would then have been loosed from the sure anchor which has mercifully held it during the blind struggles of infancy to pass to immediate destruction. Happily the moral laws are as sure as the physical laws; and what we have the best reason to believe is that there is in humanity a large amount of undeveloped mentality, which, when developed, shall be effectual in practically realising the long-known and long-neglected principles of morality.

That the development through which nature is progressing points to a more complete realisation of moral law in connection with intellectual progress, would seem to be indicated by the reflections which palæontology suggests. The fossils of prodigious size show that the animals of extinct species were much larger and more destructive than any which exist at the present day. Savage animals, that are now banished to the dark places of the earth, at one time roamed over the whole surface thereof. The lion, which must now be sought in its distant lair, then existed in England and in Germany. The

* J. Hollingshead, in his 'Ragged London in 1861,' who has lived amongst the poor and knows their ways, says:—"The simplest forms of insurance are neglected by them . . . early reckless marriages are contracted—marriages, as I have said before, that are as much a dissipation as gin-drinking or any other abomination. Children are produced without thought, set upon their feet without clothing, taught to walk, turned into the street without food or education, and left to the ragged school, the charitable public, or the devil. . . . They increase and multiply, and all for what? To become paupers; to glut the labour market; to keep their wages down at starvation point; to swell the profits of capital."

existing sloth of South America was then represented by the gigantic *mylodon* and *megatherium*; the armadillo by the huge *glyptodon*, one of the smaller species of which measured nine feet in length. The *dipratodon*, which was the representative of the kangaroo in Australia, had a skull which was three feet in length; and the *thylacoles*, a carnivorous marsupial, was not inferior in size to the lion. Destruction seemed to be everywhere the law of nature. The experience of the present day, on the other hand, proves that there are very few animals which may not be tamed and made use of by man; and the existence of societies for the prevention of cruelty to animals indicates that he, at any rate, is becoming alive to the duties under which he lives with regard to other animals. The disappearance from off the earth of those vast and formidable creatures of palæontological ages, together with the changes that are taking place on the earth at the present day, seem, then, to be prophetic of an empire of love, and dimly to foreshadow a far distant period when, perhaps, "the lion shall lie down with the lamb, and a little child shall lead them." As regards man, in truth, there can be no question that, if nature is to progress in mental development through him, love and virtue must replace cruelty and vice; taught by the records of the past, that the nation which has used the sword has hitherto perished by the sword, he must contentedly beat his sword into a ploughshare. For that which palæontological reflections suggest, and which history, pointing again and again the moral, produces the conviction of, is that which simple scientific observation of the natural course of the development of mind compels us gladly and confidently to anticipate; it is the realisation in general practice of those sublime principles which revelation has inculcated. And such, happily, will be the functional expression of the superior type of brain amongst modern civilised nations.*

That which is true of nations is plainly none the less true of the units forming them. Fulfilling the law of progression from the comparatively general perception of the material properties of a few simple objects to the more special perception of the complex relations of many objects, the individual mind advances in time to the conception of moral relations, and manifests itself in the moral sentiments, sense, cognitions, or feelings. The lower animal has evidently a perception of the highest object, namely, man, but it is for the most part only a simple perception of him as a material object, whilst the perception which one human being, when rightly developed, has of another is, as it embraces his moral relations, a much more complex result. To the perfection of this result indivi-

* Regarding which we might call to mind the gentle character—rudimentary moral, as it were—of the *Ateles*, which alone amongst monkeys has those convolutions generally considered characteristic of the human brain—the 'première pli de passage,' and the 'deuxième pli de passage.'

dual mental development rightly progresses ; and whosoever, from feebleness, indolence, or frailty, stops very early on the way, is very much in the position of a Bosjesman looking at a tree as compared with an accomplished botanist regarding the same object. Though man is endowed with a noble birthright, he must labour hard to assert it ; for it is by no means sufficient for him to open his eyes upon the world, but absolutely necessary that he look into it. He is gifted with sight that he may by his own exertions get insight, and the most successful intuition is founded on a very careful and continued previous mental training. Now, if the individual fails to assimilate his inner conscious life to the wondrous intelligence of nature ; that is, if he simply fails in mental development, and no more, his posterity may, under favorable circumstances, continue the development ; but if he not only fails to advance, but actually goes backwards, there is every probability that his posterity will continue the retrogression ; and that, as in the nation so in the family, nature will do away, for reissue under better auspices, with degenerate and unavailable material. By the law of causality evil must produce its kind. So close and delicate, too, is the relationship amongst mankind, that many innocent people are miserably affected by the degeneration of one man, whether degenerate in crime or vice or in disease. He may verily be said to keep back the universe by so much. On the other hand, the great and good man not only, as Solomon says, "leaves an inheritance to his children's children," but beneficially affects all with whom he is brought in contact, and the universe advances so much by him. As, according to geology, the most important mountain ranges lift up and sustain on their sides the beds of rocks which form the inferior groups of hills around them, so likewise the strong and moral man lifts up and supports the weight of multitudes of inferior mortals. In the great revolutions of the world, whether political, social, religious, or purely intellectual, we discern the central peak issuing from the heart of nature, and the lower surface range of hills resting on its sides. But every individual who is labouring sincerely and faithfully after the just development of his faculties, however humble his sphere may be, is to some extent aiding the onward progress of nature, which is then developing through him. And though he may not rise to the towering height of a world's hero, his service is not forgotten of nature, but his good deeds have their place in the plan of development, and go on working through all time.

In the innate eagerness of men for knowledge, and their restless pursuit of truth, and in the intense gratification which their labour affords them, we seem again to recognise the benevolent purpose which has, from the beginning, been striving to advance life to a higher grade. And as if more surely to effect this, it has been ordained that happiness shall not attend the acquisition of know-

ledge so much as the pursuit of it.* Man does not feel so great satisfaction on reaching the goal as to induce him to stay there; but he does feel so great a pleasure in struggling for it, that when the course is over he is eager to start again. And this he joyously does, though he has but the faintest possible notions of the end for which he is labouring under the sun. Sufficient is it for each one to feel that, with the definite aim of the development of his moral and intellectual nature before him, he must work definitely for that object, must pursue with quiet constancy his course, "like a star without haste, yet without rest;" in other matters, outside his orbit and beyond the reach of his faculties, being content to "stretch lame hands of faith," and "faintly trust the larger hope."

As far as we can judge, the force of the universe is a constant quantity. Nothing appears to be added, and nothing is taken away. When the force of man is augmented in mental development, it is evidently at the expense of the forces of nature; and when man degenerates, nature increases at his expense. The correlation which is believed to exist between the physical forces may well be supposed to exist between them and the mental or vital force. Speculation on this matter is, however, of no avail, and must always come back to the place where it has been times and times before. We can say no more now than what Euripides said in the 'Olympiads'—"All things are but a mingling and a separation of the mingled, which are called birth and death by ignorant mortals." Love is the creative power, viewing it on the moral side, which mingles and makes harmony, while hate is the destructive power which separates and makes discord. With the progressing development of nature love seems to be increasing at the expense of discord, and manifest order to be superseding seeming confusion, or rather, advancing knowledge is becoming conscious of the love that there is in every apparent evil.† In fact, the wider and deeper our insight becomes, and the more clearly do we perceive love working in every event of nature, all-embracing, all-supporting, all-powerful. It will be man's glory and the accomplishment of his destiny to reflect in his life the clear, pure light of love, instead of the coloured reflection which his infirmities now produce. So doing, he will realise the possibilities of a type

* Ancients and moderns have often expressed this truth, as Sir W. Hamilton, in his 'Lectures on Metaphysics' shows. "Si je ténais la vérité captive dans la main, j'ouvrais la main afin de poursuivre encore la vérité," said Malebranche.

† On which subject we may very properly refer to the grand utterance of the 'Pater profundus' in Göethe's 'Faust,' commencing

"Wie Felsenabgrund mir zu Füßen,"
&c. &c. &c. &c.,

and ending

"Sind Liebesboten, sie verkünden
Was ewig schaffend uns umwallt."

which, in the possession of so great and noble a potentiality, is exalted immeasurably beyond all other types in nature.

“ Arise and fly
The reeling Faun, the sensual feast ;
Move upward, working out the beast,
And let the ape and tiger die.”

Report on Gheel by the Commission of the Medico-Psychological Society of Paris, read at the sitting of the Society, December 30th, 1861.

[THE French alienists, as deeply interested as we have been in this country, in the much-mooted question of the value of the Gheel system, have preceded us in an earnest and praiseworthy effort to solve it with an impartial and educated judgment. At the meeting of the eminent Medico-Psychological Society of Paris, held in July last, the society formed a commission to visit Gheel and to report. The commission consisted of the following eminent alienists :—MM. Michèa, Moreau, Mesnet, and Jules Falret, Trelât and Baillarger. The report has been drawn up by M. Jules Falret. The multiplied writings upon Gheel which have hitherto been put before the general and medical public have dealt, for the most part, only with the surface of the system, and too frequently with its sentimental appearances ; this careful consideration, therefore, of its merits and demerits, founded upon a minute investigation made by a commission of eminent psychologists, is of great value. The early pages of the report, in which the details of the Gheel system are described, have been omitted by us, because they do not differ materially from the descriptions given in these pages by the able pens of Dr. Cox and Dr. Sibbald, and even in the present number by Dr. Carmichael McIntosh.—Ed.]

We have to record the favorable impression which we have received from the inspection and examination of many of the nurses* of Gheel, of the public spirit which reigns among the inhabitants of this colony, and the conduct of the majority of them among their patients, without dwelling upon unfavorable instances (happily exceptional) of nurses who are unfaithful to their trust. These acts are, however, now severely checked ; they become more and more rare in proportion as the central administra-

* We have in this paper rendered the French *nourricier* by the word *nurse*, which scarcely, however, seems to convey the exact meaning ; a stricter translation would be *foster-father* ; it is used in the paper to signify the person in charge of the lunatic.

tion exercises a more active and efficacious control over the most distant cottages, as well as over those houses which are in the centre of the town.

Another fact equally worthy of note, that is authenticated by questioning the inhabitants of the commune of Gheel, is the surprising unanimity which prevails in all their replies relating to the infrequency of accidents, whether formerly or now. On questioning the inhabitants, even those who have not the insane living with them, upon the frequency of accidents in the colony, everywhere the same answer is given. All affirm that accidents of every kind have always been very rare at Gheel, and that they are more so at present than formerly. By dint of research we can only discover five or six murders committed by the lunatics since the beginning of this century. The fact of the burgomaster killed by a lunatic, mentioned by many authors, is in the memory of all; but it is needful to interrogate many individuals before arriving at the knowledge of other facts of the same nature. The acts of violence exercised by the lunatics upon other patients, or upon the inhabitants of the town, are necessarily more frequent than the completion of murder; but, after all the evidence, they also would seem to be far less frequent than would be supposed at first sight, according to the fear which lunatics left at large would inspire.

Incendiarisms, or attempts at this crime, have at various times been somewhat frequent in the commune; but it must be remarked that there was no evidence to prove they were always to be attributed to the lunatics; in truth, when a conflagration takes place through negligence or want of care, every one is ready to accuse the lunatics rather than the other inhabitants, and this suspicion is not always well founded. As regards suicides, the official statistics note a very small number every year, in proportion to the whole amount of lunatics in the colony; there are even some years in which no suicide occurs. The number of pregnancies of lunatic women is very small, if we compare it with what we might expect it to be, with the degree of liberty which the lunatics enjoy, and with the continual association of the different sexes, even in the same house. And it is a remarkable thing, according to the information we have collected, that the pregnancies are always the result of connection with strangers, or the inhabitants of the commune with the lunatics, and never by intercourse with each other.

The results furnished by the official statistics, or by the verbal testimony of some of the inhabitants of Gheel, are insufficient to determine with certainty the real number of accidents which arise from the contact of the lunatics with the whole population of a town under exceptional conditions of liberty. Many causes of error may prevent the truth from becoming known, the nurses having an interest in hiding the accidents caused by the lunatics, for which they

may be considered responsible. Moreover, there exists in this respect among the inhabitants of the commune a joint responsibility which is very remarkable. It is explained by the community of interest which unites together all the inhabitants of a town of which the lunatics constitute almost the sole wealth, and by a kind of common self-respect which constrains all, willingly or unwillingly, to uphold the colony in the presence of strangers, to enhance its merits, and to disguise, as much as possible, its deficiencies, and its dangers. We are far from being blind to these causes of error. We are even disposed to think, without having certain proof, that the accidents of which we have spoken may be more frequent in the commune of Gheel than the inhabitants themselves avow, or than are noted by the official statistics. But whatever the exact and precise number of these accidents, what we think we may affirm is this, that they are extremely rare in proportion to the whole amount of the lunatic population, especially if we consider the facilities open to the patients to commit them, and the large amount of liberty which they enjoy.

By studying with impartiality the position of the lunatics in the commune of Gheel, we come to the conclusion that its disadvantages have been much exaggerated, and that, especially since the reforms that have been instituted of late years, the patients are, as a whole, in a better condition than *à priori* could be believed.

We certainly do not partake the exaggerated enthusiasm of certain partisans, who have gone so far as to make Gheel a sort of ideal paradise of madmen, where the lunatic finds himself surrounded with all those advantages impossible to be met with elsewhere.

We are about to pass in review the serious disadvantages which in our opinion this colony presents, and which are not only of the nature of transient imperfections, but are inherent in the institution itself. But these serious deficiencies do not prevent us from acknowledging the advantages which the colony possesses for certain classes of patients. We cannot enumerate the whole; this inquiry would lead us too far. It is enough to note the two principal ones, upon which the advocates of this colony have chiefly rested, of which, however, they have strongly exaggerated the importance; we mean the liberty of movement left to the lunatics, and the life in common with the families of the townspeople and the peasantry. These two essential characteristics of Gheel distinguish it from all other institutions for lunatics; whatever their form or nature, asylums can never supply the like advantages in the same degree, and they are, in our opinion, for certain lunatics incontestable ones. But these once acknowledged, we cannot help remarking that the advantages of Gheel, upon which such eloquent pleaders have dwelt, are far from being suitable for all patients, and also from being as absolute and unlimited as they would wish to make them.

And first, in relation to domestic life, a residence in the midst of

strangers can never become for all lunatics an absolute equivalent to family life at home. Without doubt it may be affirmed, as the defenders of Gheel have done, that in a therapeutic point of view the position of lunatics in a family of strangers combines all the advantages described by authors in favour of isolation—separation from things and persons which have contributed to produce the malady, and which continue to feed and maintain it; removal to a different position and new surroundings; without always offering the disadvantages which the partisans of Gheel attribute to the seclusion of an enclosed asylum. But if this argument has any value in relation to recent cases susceptible of cure, it loses much of its weight as applied to most of the chronic cases to be observed at Gheel. It cannot be denied that in a certain number of cases, especially among the women, residence in the midst of a strange family however kindly disposed, cannot completely compensate them for removal from their own families or from their native country. Consequently, the family life, so worthily praised in certain respects, is not exempt from trouble and annoyance; to a certain degree, it resembles isolation in an asylum for certain patients capable of feeling the misery of separation from their families. It is precisely these patients who would be most susceptible to the feeling of its comforts.

With respect to the liberty of the lunatics, which has been made so great a merit of at the colony of Gheel, it is of much consequence to remark how far it is from being absolute, how much, consequently, this advantage, which is considered superior to all the rest, is attended by numerous restrictions which greatly limit the exercise of it. Doubtless, liberty of movement exists at Gheel for the lunatics to a degree which it would not be possible to realise in an ordinary asylum. These patients usually go about without being followed in the houses, in the streets, and in the fields. There are no insurmountable walls, no closed gates, to intercept their movements. Nothing savours of the rules or discipline of an asylum, the obligation of submission under pain of punishment to a regulation, or marching to the bell or the drum. Each patient is left to himself, to his caprices, and to the natural bias of his delusions, without being opposed. Without considering the therapeutical side of the question (which, however, has great value, and which ought here and everywhere to predominate over all others) it is just to say that for certain lunatics this is a benefit which they greatly appreciate, and which some enjoy even more than other benefits which they can obtain in asylums. But the need and the sentiment of liberty, are they so general among lunatics as we are led to believe? Are these patients similar in this respect to ordinary prisoners? Is the liberty at Gheel really so complete for them as is pretended? Such are questions which it is very needful to discuss.

In visiting an asylum of lunatics, one is impressed at first sight

with the great number of patients who claim their liberty. This desire is indeed very general. There are, besides, certain lunatics who, without expressing it as noisily as others, nevertheless express it with vivacity. But we think that here, as in many other things, one is led astray by appearances; the continued clamour of those lunatics who demand to have their liberty deceives as to the real number of patients who are very eager to go out. When from this point of view we attentively examine all the lunatics of a large asylum we are soon convinced that many among them, entirely dominated by their malady, live concentrated in their inner world, without seriously disquieting themselves as to their place of abode, and that they are infinitely more preoccupied with the object of their delusion than with the desire to go out. They are in an asylum precisely what they would be out of one, or anywhere. Take them from the asylums and remove them to Gheel, they will be neither more happy nor more wretched; they will there display the same manifestations, without troubling themselves at all about their removal.

At Gheel, where there are a large number of incurables, there are many patients of that class who are happy, but who would be the same in this respect in an asylum, since they do not appreciate the blessing of liberty nor feel its value. The ardent desire for liberty is most apparent among the insane during the acute stages of their disorder, at the period of convalescence, or during the lucid intervals of those who are subject to intermittent attacks. When it is too intense and too exigent in these unhealthy conditions, it also frequently denotes the near approach of an attack, or the incompleteness of the convalescence and the danger of a relapse. Many chronic lunatics, on the contrary (and these are the patients most commonly met with at Gheel), do not really suffer from the privation of liberty; and, consequently, they do not enjoy, as supposed, the benefit of it, nor can they appreciate its value. This liberty, which gives evident satisfaction in a certain number of cases, and is greatly desired in others, is more extended at Gheel than in any other asylum; it is, however, far from being absolute and unlimited, as is wrongly imagined when one has not visited Gheel, and has only read the works of literateurs or the novelist on this subject. The quiet and harmless lunatic is, doubtless, at liberty to leave the house and to walk in the country, without being constantly followed by an attendant, as is the custom in all asylums; but it is not sufficiently noticed that, notwithstanding this liberty of movement, he is really under guardianship, and plainly in an inferior condition with regard to the rest of the population. He is, unknown to himself, surrounded with a vast net of surveillance, which envelops him everywhere; and, although not evident under the form of walls, gates, gratings, and attendants, it is not the less real; it constantly imposes limits to his liberty, and obliges him constantly

to live in an atmosphere of moral and material restriction. In fact, at Gheel the lunatic is far from enjoying the same amount of liberty as the other inhabitants. Because he is a patient, he forms a part of the population which excites in the rest a kindly pity, and on account of which he receives the right of protection which is constantly exercised towards the lunatic by the mere effect of the superiority of reason over folly. This general surveillance, exercised at all times by the sane population upon the insane, is not one of the least attractions of Gheel for the attentive observer. It is really a very curious phenomenon. It explains the mystery which Gheel offers to those who have not yet visited it. It is asked, how is it possible to give to the insane the same degree of liberty granted to the sane; and how is it that, under such conditions, when patients are left to themselves without any surveillance, accidents are not of more frequent occurrence? But this theoretical idea, which makes the colony of Gheel an incomprehensible mystery, does not express the reality.

This mystery is explained by the general fact that 800 lunatics are under the protection and the surveillance of 10,000 inhabitants. The latter are always ready to guide and support them; they check them in the manifestation of violent or disorderly acts; like children, they guide them at will, whether it be by gentleness, by craft, or even by severity, and thus avert the mischief they might do to themselves or others. But this protection extends only to the patients who move about in town or country, and who are in reality the fewest in number. The nurse is, in short, the real and responsible attendant on the lunatic. It is to him that the lunatic is confided, for whom he must answer to the family and the authorities; he must know where he is and what he does; he must forbid him to leave the house when it would seem to be injurious, and avert from him whatever may occasion disturbance or public scandal; he must make him return at the hour of meals, and at a suitable time in the evening, that he may not wander in the fields or pass the night from home; in a word, he must prevent his escape. The nurse is not only morally responsible for the acts of his patient; he is deeply interested in preventing him from doing wrong, that he may not lose him, that he may not be removed, and that fines and penalties may not be imposed. The nurse is, then, the real guardian of his patient, and it would be untrue to say that at Gheel the lunatic is not guarded. He is watched, not only by the nurse himself, but by the whole family. If he is allowed to go out alone, it is that confidence is reposed in him; immediately the keeper entertains fear about him he is not again left; he goes with him and follows him everywhere, as an infirmity attendant would do, or else he keeps him in the house by art or by force, as he would a child; he shuts him up in his cell; he ties him to his bed, puts on the camisole, the iron belt, or the shackles. This is the amount of liberty which is permitted to the lunatic at Gheel. If to these

various restrictions are added the police regulations, which, under certain circumstances, interdict the lunatic from the public-house, from balls, from the purchase of tobacco, of drink and of many other things, from sending letters by the post, &c., regulations which oblige them to return in good time to the house, and which give authority to the guards of section to compel their return, it is clear why the guarantees for their security are stronger at Gheel than elsewhere, and also stronger restrictions upon their liberty than appear at first sight to exist.

Notwithstanding the reservation we are compelled to make in relation to the two principal advantages which are dwelt upon by the partisans of Gheel, we willingly acknowledge that the family life and liberty to move about are, in a certain number of cases, a real benefit not to be found in the best-conducted asylums. Yet these advantages are only ensured to them at Gheel under exceptional circumstances, which are far from being exempt from serious disadvantages now to be considered.

The most serious disadvantage of Gheel, that which in our opinion is predominant and which greatly counterbalances its advantages, is that the fact of placing lunatics in the families of peasants scattered over a wide territory is in itself the negation of all active and individual therapeutics, either moral or physical. It may be answered that, in regard to isolation, the beneficial influence of things and persons, exercise in the open air, and occupation, the patients at Gheel are in as favorable circumstances as those in asylums; but even in regard of general treatment, exercised by personal and local circumstances, the total absence of order, of rules and discipline, to which all alienist physicians have attached great importance, must be looked upon as a most lamentable deficiency in the interior organization of Gheel. No physician, habituated to the charge of lunatics can admit (as M. Jules Duval has done in his work) that it is always good for the amelioration of the intelligence or the feelings, that the patients should be completely abandoned without counterpoise to the unrestrained flow of their frenzied ideas, to the mastery of their morbid inclinations, and to the free manifestation of their disorderly acts. Certainly it may be replied that liberty is in some sort a counterpoise to itself, and that the more the insane have the liberty to act as they like the less will they abuse it, and the more will they restrain themselves; that occupation, carried out as it is at Gheel on so extensive a scale, is a powerful agent of order and discipline, and acts as a counterpoise to the tendency of the insane to self-concentration and to nourish their delusions by dwelling upon them. It may again be said that in the best asylums many of the lunatics are left to idleness, and follow, even as they do at Gheel, without interference, the course of their frenzied ideas, yet we cannot admit the absolute falsehood of all that in this respect the most able physicians

have said and written in every country for more than half a century upon the influence of the rules, the order, the discipline of asylums ; in a word, upon the surroundings of the lunatic, influences which made Esquirol declare that a well-organized lunatic asylum was the most powerful therapeutic agent in mental disease. We cannot forget all that has been written upon the general treatment of lunatics, upon the slow and continued action of the external circumstances which surround them, the medical atmosphere which they breathe, and which everywhere envelops them ; we cannot believe that all which constitutes the foundation of our modern science is absolutely false ; that we must exclaim, like the exclusive partisans of Gheel, that free air and liberty suffice for the treatment of the insane ; that to abandon delusion to itself, and to abandon the insane to the free and complete manifestation of their ideas, their desires, and their acts, without any medical intervention, ought to be considered as the ideal and the *ne plus ultra* of the therapeutics of mental disorders.

But it is not only under the aspect of general treatment that Gheel appears to us inferior to asylums for patients who are susceptible of any amelioration ; it is especially so as to individual, physical, and moral treatment. Certainly there have been great ameliorations in the medical department, especially of late years. Leaving the lunatic entirely to the care of the nurse is not practised as it used to be ; an efficacious medical control and action are felt at the furthest extremity of the colony as well as in its centre. This is an evident improvement, and we are happy to render full justice to the physicians of section who zealously visit the lunatics, and to the physician inspector who manifests in his difficult functions an activity, a desire to benefit, and a profound knowledge of his patients, which is truly surprising in the midst of very considerable material difficulties. But every one will agree with us, that eight hundred lunatics, spread over a circuit of nine leagues of country, in isolated habitations, are far from being placed in the most favorable conditions for the physician to exercise a really salutary influence, either upon the patients or the nurses themselves. Whatever be the amount of activity expended on such a work, it is beyond human skill to accomplish. Do what you will, the medical intervention must reduce itself to general superintendence, to a central direction, and cannot be exercised individually upon certain lunatics who have need of the direct and personal attendance of the physician. Doubtless these constitute the smallest number ; since, in the state of our imperfect knowledge of mental disease, the individual, physical, or moral treatment, yet plays but a feeble part even in our best asylums. But notwithstanding this lamentable void in actual science, a physician, worthy of the name should never despair of progress, should never abdicate the rights of the future or aid in arresting the advance of science. He

would act thus if he proclaimed that the best system to follow in the treatment of lunatics, the ideal of mental therapeutics, consisted in placing the patients at great distances from each other and from the physician intrusted with that care, to confide them to a multiplicity of nurses, almost exempted by their number and their remoteness from all medical direction, and to place them in local circumstances where all the resources which the physician finds united in an asylum are absolutely wanting. The village of Gheel cannot, in our opinion, support a comparison with our asylums, when we examine it from a therapeutic point of view. Neither the devoted attention of the physicians, who have undertaken this difficult task, not even the establishment of an infirmary which will be however a real improvement, can wholly remedy this immense deficiency in the colony, which is so closely bound up with its very constitution. It can only be effaced by transforming the infirmary into a real asylum, and by admitting all the lunatics into it for treatment. This will be deserting the principle which lies at the foundation of the colony, and which its advocates vaunt so highly. It will be to deny the therapeutic efficacy of the free air and family life system, and to acknowledge with us that Gheel can only be of service to chronic lunatics for whom there is no hope of cure. The considerations we have just brought forward on the disadvantages of distance and the dispersion of the patients in a medical point of view, apply equally to the surveillance and the precautions which have been taken to ensure the security of the lunatics and of the other inhabitants. We certainly admit as an incontestable fact, since observation demonstrates it, that accidents of all kinds are very unfrequent at Gheel, much more so than could be supposed *à priori*. But this concession made to the truth of observation does not go so far as to proclaim that the system followed at Gheel offers stronger guarantees for the surveillance of nurses and patients, and for the security of all, than the more perfect system carried out in our best asylums. The obstacles arising from the too great dispersion of the patients, the considerable distances to be traversed, especially during winter, the small number of agents appointed to watch over the patients and nurses, are so indisputable, that if serious accidents are not more frequent than in asylums, it is at least impossible but that abuses of all kinds must necessarily be of more frequent occurrence. The patients have too many facilities for carrying out violent or injurious acts, the nurses who would take advantage of them, denying them things which are indispensable or maltreating them, can too easily escape the vigilance of the authorities for these abuses not to be more frequent than they are said to be; and it is plain that in our establishments the attendants who neglect their duties are more closely and continually watched in all the details of service than the nurses of Gheel can be, especially in the outlying hamlets.

After the disadvantages which, in our opinion, are apparent in the colony of Gheel, under the head of treatment and the security of the lunatics, we must also remark upon those which relate to the welfare, moral and material, of the patients. These are based upon the advantages of liberty in the open air, family life, and of field labour, so especially praised in the colony of Gheel as superior to enclosed asylums, and for which the benefits of treatment and the guarantees of security which the asylums present are sacrificed. But even from this point of view the welfare of the lunatics at Gheel leaves much to be wished, especially for a certain number. It is inferior in many respects to that which is every day attainable in asylums. Thus, the chronic, quiet, and inoffensive patients, to whom the system at Gheel is peculiarly suitable, are worse off as to nourishment, clothing, personal care, and material resources of all kinds, than they are in public asylums. Lunatics who are of uncleanly habits, the destructive, or those attacked with incidental disorders, are certainly not so well cared for as in ordinary asylums. In short, refractory or dangerous patients, or epileptics, all those, in a word, who excite fears of any kind, are incontestably worse off and less happy at Gheel than in asylums; it is necessary, from the very effect of the general system of liberty, to carry out in such cases more severe and continued measures of restraint than those employed for the same patients in ordinary asylums.

To these disadvantages inseparable from the system itself must be further added some secondary disadvantages which it would be more easy to remedy, such as the too intimate association of the two sexes which exists even in the same house, the insufficient classification of the lunatics of various categories in the different hamlets (a classification already commenced, it is true, by M. le Dr. Bulkens), the too great number of patients sometimes found collected in one family, and, lastly, the inconveniences frequently arising from the patients not speaking the same language as their nurses. It is therefore seen that if the colony of Gheel presents some incontestable advantages for certain chronic lunatics, it is nevertheless far from being exempt from grave disadvantages, and that it does not merit (as its ardent advocates say of it) to be raised to the rank of being the exclusive method of public beneficence to the lunatic.

This colony, as it is actually organized, is neither so good as its enthusiastic partisans have pretended nor so bad as its systematic adversaries have affirmed. It is a mode of public assistance to the insane, which has its advantages and its disadvantages. It is especially suited to those numerous lunatics who have reached an advanced period of chronicity, who are usually tranquil and inoffensive, whose periods of excitement are infrequent, and who need neither assiduous care and treatment nor energetic measures of repression. But for those patients who, in the acute attacks of their malady, are really

dangerous to themselves or to the public safety, for those whose state of disease needs constant care or continued medical treatment, no circumstances can, in our opinion, supply the place of the moral and material advantages which the lunatic now finds in our well-organized asylums. The physicians and the administrators of this colony are, however, perfectly aware of the deficiencies of the system they have extolled. Therefore they have demanded an infirmary wherein to receive new patients, such as have need of active treatment or much personal attendance, as well as the excited, or those likely to trouble the public order and security. Further, they have established a rule, which not only permits, but makes it imperative, to send to the other asylums in Belgium homicidal lunatics, suicides, incendiaries, erotics, all who are likely to cause disorder or scandal of any kind to public manners, and, last, those who by their active and continued attempts at escape necessitate the constant employment of means of restraint. The administration has truly felt that chains and excessive means of repression are a blot upon the colony, an infraction of the principle of liberty, and an inevitable consequence of this very liberty. Thus, by organizing the infirmary and by the most stringent application of the law relating to patients disposed to escape, they hope to be able gradually to diminish the number of lunatics who need these means of restraint, and are thus deprived altogether of the benefits of the system of the colony.

The conclusion that we must draw from the examination of the colony of Gheel is widely different from that of its partisans or its detractors. We do not see in this mode of relief to the lunatic an entirely different system to that of our asylums, a method to be adopted exclusively or rejected as absolutely bad. We believe that the system of family life and of liberty in the open air adopted at Gheel for ages, and that system which has been in use in a progressive manner in asylums for half a century past, do not necessarily exclude each other to such a degree that a decision in favour of one would inevitably condemn the other. We believe, on the contrary, that with the exception of the two differences, important, doubtless, but not fundamental, which exist between the colony of Gheel and our existing asylums (liberty to go about and living in the midst of families not insane), these two systems, far from being absolutely opposed, are but the realisation, more or less perfect, and by different means, of the same principles which have presided over the improvements of our establishments for the insane for sixty years past.

What are really the principles which Pinel inaugurated at the end of the last century, and which have been developed since that time by all those who, in every country, have contributed to ameliorate the lot of the lunatic? May they not be summed up in this general reflection, that the best means of contributing to the well-being and

treatment of these patients, consists in allowing them as much liberty as possible—all the liberty, in a word, which is compatible with their proper security, and that of society?

To abolish by degrees in the site, the structure, and regulations of asylums, all that which recalls the prison, or even the hospital; to make them resemble more and more the ordinary habitations of common life, only to preserve that which appears absolutely indispensable; to give the lunatic by every means the appearance of liberty, when the reality cannot be accorded; to avoid by a methodical classification the contact of those patients who are most excited, to have patients as rarely as possible isolated in their chambers or their cells, to make them live together in common rooms, and take their food at the same table; to furnish them both indoors and out with all kind of occupations and recreations, and especially with exercise in the open air; to occupy them principally and physically in agricultural labour; to diminish by degrees the amount of mechanical restraint, and even at last to discontinue its use altogether; to calm the nervous excitement of some patients by letting them expend it out of doors in liberty of movement, instead of endeavouring to restrain it by useless means of repression, which only increase and foster it; and finally to endeavour to utilise the exuberant force of some lunatics, instead of allowing them to spend it in the pure loss of disorderly movement; such are the fundamental principles of modern asylums in every country. And are they not the same which are in use at Gheel, with variety of means but identity of purpose—the same which the admirers of that colony have committed the error of attributing to it, as if it alone possessed them?

In place of opposing the colony to the asylum as two systems which necessarily exclude each other, they ought in our opinion to be considered as two different applications of the same principles, and as two different forms adapted to realise them. From this point of view only secondary and not fundamental differences have to be sought for between the colony and the asylum.

It only remains to examine which of these two forms realises these principles the most usefully, which best conciliates the interests of the individual with those of society, and the exigences, often contradictory, of the well-being, security, and the treatment of the lunatics. It remains to determine for what cases of mental disease the one or the other system is the most advantageous, and to find a middle term to conciliate them; it is this which has been tried at Gheel, and that which is yet being tried there. By the earnest organization of a central administration, and of a regular medical service, Gheel has already made a step towards the system of our asylums. By the establishment of an infirmary, which will be open next year, another advance will be accomplished in the incessant movement which brings Gheel to resemble the organization of our establishments. On

the other hand, the best organized asylums tend from day to day to accomplish perfection in increasing the amount of liberty granted to the patients; and in this respect they may derive much profit from the example which is set them by Gheel.

In this double movement, in an inverse direction, the progress of each system will consist; Gheel can only improve by drawing towards the closed asylums, and these in their turn can only improve by progressing with slow prudence, but with perseverance, in the path of liberty. Where ought this double movement to stop? What is the precise point where the best practical solution of this difficult problem can be found—the greatest possible amount of liberty which can be granted to the insane without injury to their welfare, their safety, and their treatment? This is a question which cannot be determined at present, and which only the future will be able to solve. In our opinion, Gheel has more to gain by copying from asylums, than these by taking example from Gheel, but on this delicate point opinions will greatly differ; some prefer the asylum system, others that of free life, but there is a neutral ground upon which the most divergent opinions may meet. This neutral ground is a system in which it is admitted that the two methods, far from excluding each other, are but the complement one of the other. But the colony to be really useful cannot dispense with the asylum as an infirmary, and an asylum cannot be perfect without the adjunct of a colony. But which element ought to predominate?—Ought the infirmary, as at Gheel, to be annexed to the colony, or would it not be better to make the colony an adjunct and natural complement of a well-organized asylum? Here differences will arise, and each one will desire the predominance of one or the other, according to his predilections.

Such is the general impression which our visit has left us of the colony of Gheel. The system may, then, to a certain extent be adopted as one mode of public beneficence for certain chronic cases of insanity; but unfortunately the position in which the patients are placed at Gheel can scarcely be realised in any other locality. Gheel is the product of centuries, the result of long tradition transmitted from generation to generation, and can never be reproduced in other countries.

Where can be found moral and material conditions which make Gheel a place altogether exceptional and unique?—A territory of vast plains, with no natural features calculated to inspire fear for the insane left at large, with the exception of a small river at one end of the commune far from any habitation; a wide belt of heath surrounding the commune, and forming an obstacle to the escape of patients and to the ready entrance of strangers; houses of generally one storey in height, grouped together and dispersed in hamlets, with a central town in which a trading community exists, without, how-

ever, any important manufacture which could attract an unsettled population, injurious to the order and welfare of the lunatics; the inhabitants, whether townspeople, farmers, or peasants, belonging to a mild, calm, and benevolent race, of almost patriarchal manners, and habituated to field labour; and lastly, a circumstance of the highest importance, and the rarest of all, a population which during centuries has contracted by tradition the habit of taking care of the insane, and which, far from fearing them, or being apprehensive of permanent contact with them, possesses on the contrary the inclination, the tact, and all the aptitudes which are necessary for the care of such patients! This certainly is a combination of circumstances altogether exceptional, which it is almost impossible to find united elsewhere. In Belgium and other countries, isolated attempts have been made to imitate the Gheel system. Some inoffensive lunatics have been placed with peasants in the hope of procuring for them welfare and liberty at a cheaper rate than in asylums. Guislain tried this several times in the province of Ghent. These attempts, however, have almost always failed, in consequence of the repugnance of the people of the country, who were too much in fear of the insane to retain them, or even in consequence of the refusal of the local authorities, who would not permit patients in any way capable of troubling public order and security, to remain in their communes. At the present time, and with the prejudices existing in all classes against the insane, and with the apprehension, to a certain extent legitimate, which the insane inspire in all those around them, one cannot hope to realise in another country the extraordinary phenomenon presented at Gheel of 400 insane persons moving freely about in the midst of a population which tolerates them without fear and without emotion.

But if it should appear that such an attempt could not now be realised, one ought not to despair of accomplishing it at some future time. If one cannot imitate it upon the large scale, one can at least attempt partial and restrained applications of it, like that proposed by Roller, in the neighbourhood of asylums. We should especially endeavour to derive information from this colony, in order to make perfect the general system of our asylums as to the liberty granted, and to realise under another form the system of colonization for the insane of which Gheel offers so remarkable an example. This is the true practical result of our labour, upon which, in conclusion, we cannot prevent ourselves from insisting.

The most important practical result which we can draw from a visit to Gheel is, that many chronic lunatics may enjoy without danger a much greater amount of liberty than is supposed possible, even in the best organized asylums.

What is the degree of liberty at which in the present state of our knowledge it is right to stop, in order to reconcile the needs of security

with those of the welfare of the patient? This is a point upon which great difference of opinion may well exist, and which future experience alone will be able to determine with precision; at the present time, however, it may be affirmed that in our asylums, notwithstanding the immense advance made since the commencement of the century, some progress in this respect is possible. The example of Gheel will be useful in showing that many lunatics are less dangerous than is supposed, and in indicating some practical means in procuring for them a larger amount of liberty without danger to the common safety. Already, the physicians and officials of asylums in every country have made various attempts in this direction. In England, some lunatics have always been placed in the workhouses, and many institutions, public and private, have endeavoured to establish for certain patients "*the cottage system*," that is to say, the use of isolated houses for the patients, either within the limits of the asylum or in its neighbourhood. In Germany, also, for a long time past, some exceptional patients have been placed by their relations, or by their physicians, to live with tradespeople, clergymen, medical men, or peasants; and M. Roller (in the report on Gheel in the fifteenth volume of the '*Journal of Psychiatry*') has registered a vow, to disembarass the lunatic establishments of their superabundant population, by confiding certain chronic and inoffensive patients to the families of peasants in the neighbourhood of asylums, whom the physicians might easily visit, and exercise surveillance, useful both to the patients and peasants to take charge of them. But such measures are altogether partial and insufficient, often even injurious to the patients, and, moreover, they can only be applied to a very small number of the insane. The only method of realising for a great number of the insane this idea of a mixed system, in which the patients could enjoy a larger amount of liberty than in asylums, without, however, being left to chance either in their own families or those of strangers, consists in the neighbourhood of the establishment of agricultural farms under a special direction, with regulations and organization less severe and complicated than those of asylums for treatment, and in direct and constant relation with the central asylum. The physician would choose the patients who could be employed with advantage to themselves or to the establishment on the work of the farm, and he would at any time be able to send back to the central asylum any patients whose mental or physical state required the renewed treatment of that establishment.

This idea was conceived and executed in 1828, at the farm of Saint Ann, by M. Ferrus, but at the present time it has almost fallen into disuse there. It has been also applied with more or less success in the large establishments of all countries; but no where has it been realised in a more complete manner than in the colony of FitzJames, established in 1847, by MM. Labitte, as an adjunct to

their private asylum of Claremont (Oise). We regret that we cannot here examine in detail its organization, and the advantages which it may present for chronic lunatics, provided that therapeutic intention is never sacrificed to agricultural advantage. In ending our report, we must briefly refer to this method of the system of colonization as applicable at the same time to augment the welfare of the insane, and to diminish the charges upon the departmental administrations, which can scarcely meet the constant increase of their expenses. When occupied in ameliorating the lot of the unhappy beings confided to his care, the physician ought without doubt never to permit himself to be guided exclusively by considerations of economy; but when it happens, as in the present question, that the means proposed satisfy at the same time the demands of economy, of philanthropy, and of science, the physician can only endeavour to promote their general application. In every country, the progressive increase of the number of lunatics, the inevitable over-crowding of the establishments for their use, the inadequacy more and more manifest of the more important asylums, whose number of patients for whom they were provided is constantly being exceeded; in one word, the urgent necessity of extending help to the greatest possible number of the insane, without exceeding the financial resources which can be employed for that purpose—all these considerations impose upon those who are occupied in ameliorating the condition of these unfortunates, the necessity of discovering better methods of reconciling the demands of science with the limited resources of taxation, and of thus becoming able to help the greatest possible number of the insane at the smallest possible cost. Lunatic colonization under one form or another, appears to us the best solution of this difficult problem. It is only necessary to avoid exaggerating its importance and desiring to employ it indiscriminately in all cases. Lunatic asylums, constructed according to rules fixed upon by physicians of all countries since the commencement of the century, will always be in our opinion the best means of extending care and protection to the insane during the acute phases of their disease. But for the large number of the insane who have passed into a state of chronic disease, who have become generally inoffensive, and who offer but feeble chances of cure; one may ask whether public benevolence to the insane may not take four different forms? and, in conclusion, we submit to the society the four following questions:

1st. Is it possible to send back to their own families certain patients whose condition is greatly improved, and who appear to threaten no danger, and yet to keep them under official protection) practised under the form of pecuniary help and of moral and medical advice? This would be to extend to chronic and harmless lunatics a measure which has already been taken for the convalescent insane; it would complete the work of patronage of the insane at

home after leaving asylums, which has been in operation at Paris for twenty years, which extends its assistance to nearly 1100 persons under its protection every year, and which has been imitated with more or less success by physicians and directors of asylums both in France and abroad.

2nd. Is it possible to place separately certain lunatics, selected by the physicians, to dwell in the families of townsmen or peasants in the neighbourhood, and under the surveillance of the asylum physicians, as M. Roller has proposed to do?

3rd. Is it possible to attempt the creation of a new Gheel, that is to say, of a village for the insane, with a regular central organization of good medical service, and an infirmary, but with the express reserve to place only chronic patients in it, and to exclude from it all lunatics who are under treatment, or excited, or who threaten any danger to themselves or to the public security?

4th. Lastly (and will not this be the most practical, and generally applicable method?), is it possible to annex to the asylums for the insane an agricultural farm, receiving patients from and sending them back to the asylums as need may arise, under the advice of the physician? This agricultural farm, distinct from the asylum, although in constant relation to it, will perhaps be able, by industrial and agricultural labour on a large scale, to supply all the wants of the asylum, to make it in some measure self-supplying, and thus able, as M. Billod says in his recent pamphlet on the expenses of the insane, to exonerate the departments in some degree from the large subsidies which they are obliged to furnish every year for asylums for the insane?

Such, gentlemen, are the questions which your commission has thought it right to present to you at the end of their report, as the practical conclusion of the investigation which you have charged them to make into the system practised for centuries in the colony of Gheel.

(Signed)

CH. LOISEAU,
Special Secretary

*The Revised Rules of the Irish Government for the better Control of
District Lunatic Asylums in Ireland.*

We perceive with no ordinary satisfaction that our talented and straightforward Secretary, Sir Robert Peel, has put his hand to the plough in right earnest, by carrying, on 16th January, 1862, *fortiter et suaviter*, through the Irish Privy Council, the revised rules for Irish Asylums, cancelling the stupid and contradictory ones of 27th March, 1843.

These revised rules put an end at once and for ever to divided responsibility. Such disreputable freaks as occurred from time to time in Maryborough Asylum are at an end for ever; or if indulged in, must now be suppressed with a strong and steady hand.

Let us hope that all parties will now set themselves in good earnest to elevate their asylums to a high and honorable standard. There are able and worthy men in and attached to these great institutions, and they fortunately have over them Dr. Nugent as senior inspector, from whose hands the programme of these rules emanated, and for which he merits the fullest praise. Dr. Hatchell is also an excellent and amiable man, who merits the confidence of the various officers in this department. To the medical superintendents of Irish asylums (for such is the official name by which they are henceforward to be known) we say, be courteous, considerate, and forbearing to your colleagues. To the consulting medical officers we say, accept frankly the office now guaranteed to you by the Irish Government, and let no question be raised which might point to *assimilation to England* by any crotchety or snappish conduct towards the essentially chief medical officer of four institutions.

We take leave of the subject for the present, with one remark, namely, our unqualified approbation of Rule 19, which renders the double qualification a *sine qua non* for all future resident medical superintendents; and we trust that, on no pretext whatever, will the Irish executive depart from it. A qualification as to age should also have been attached to Rule 19, and for the obvious reason of protecting the executive against undue parliamentary pressure.

J. F.

BY THE LORD LIEUTENANT AND COUNCIL OF IRELAND.

CARLISLE.

WHEREAS by an order made on the 27th day of March, 1843, certain general rules and regulations were established for the good conduct and management of the several district lunatic asylums in

Ireland; and by orders made respectively the 13th of April, 1844, the 15th of February, 1847, and the 14th of October, 1853, certain further general rules and regulations were established for the good conduct and management of those asylums.

And whereas it is expedient that the said rules should be rescinded, as well as all bye-laws founded on them.

Now we, the lord lieutenant and privy council of Ireland, by virtue of the powers given unto us by the statutes in such case made and provided, do order and direct that the said several rules and regulations, and all bye-laws founded thereon, be rescinded, and that for the future good conduct and management of such asylums, and for defining the duties of the different officers connected therewith, the following rules and regulations be substituted in place thereof.

The Board of Governors.

I.—The board of governors of each asylum, three members whereof shall form a quorum, shall meet regularly on a fixed day, and at a fixed hour, to be determined by the governors, once in every month, (or oftener, should it be deemed necessary or advisable,) for the discharge of the ordinary business of the institution; and every such board shall examine into all fiscal details and the general management of the asylum; and after an inspection of it by two or more governors, shall enter on the minutes of the day's proceedings a report of its state as to cleanliness, regularity, and order, and the condition of its inmates, stating how far their well-being and comforts are attended to.

II.—Should a board not assemble on the ordinary day the resident medical superintendent shall issue summonses for a meeting on that day week.

III.—Special meetings may be summoned at not less than four days' notice for any particular object upon a requisition to the resident medical superintendent to that effect, signed by two or more governors, or by one of the inspectors.

IV.—A full and accurate copy of the minutes of proceedings of every meeting of the board shall be transmitted to the inspectors within four days from the day of meeting; the board shall also transmit to the inspectors the quarterly accounts and estimates of expenditure, and all applications for the advance of moneys for the current asylum maintenance.

V.—All tenders for contracts, whether accepted or rejected, signed as such by the chairman of the board at which they have been opened, shall be duly forwarded to the office of the inspectors for examination and approval. All receipts for disbursements in regard to current expenditure, duly authenticated by the the board, shall be sent to the commissioners of audit in London.

VI.—The general dietary shall be regulated by the board, subject to such alterations as the inspectors may think fit from time to time to recommend. The medical officer shall be at liberty to prescribe such extras as they may deem necessary.

Admission, Treatment, and Discharge of Patients.

VII.—Persons labouring under mental disease, duly certified as such by a registered physician or surgeon, and for whom papers of application are filled up in the prescribed form, to the satisfaction of the board, shall be admissible into district asylums, after having been examined by the resident medical superintendent.

VIII.—No patient is to be admitted without the sanction of the board, except by order of the Lord Lieutenant, or in case of urgency, when the resident medical superintendent, or in his absence, the consulting and visiting physician of the asylum, may admit upon his own authority, stating on the face of his order the grounds upon which he acts.

IX.—The board may require an engagement to be given in writing for the removal of any patient, to be signed by the friends of the patient, or the magistrate, clergyman, or other responsible person who signs the application for admission.

X.—Patients, except where special reasons to the contrary may exist, are to be clad in the dress of the institution, and their own clothes are carefully to be laid by, to be returned to them on their discharge.

XI.—The patients shall, on admission, be carefully bathed and cleansed, unless otherwise directed by the resident medical superintendent. They shall be treated with all the gentleness compatible with their condition; and restraint, when necessary, shall be as moderate, both in extent and duration, as is consistent with the safety and advantage of the patient.

XII.—Strict regularity shall be observed with respect to the hours for rising in the morning and retiring for the night; that for rising being fixed at six o'clock from the 1st of April to the 30th of September, and for retiring at an hour not earlier than half-past eight o'clock, nor later than nine for the same period. During the winter six months the patients shall rise at seven, and retire not earlier than seven nor later than eight o'clock.

XIII.—The like regularity must be observed with respect to meals; in no case shall the number of meals be less or more than three, and they shall be supplied during the summer six months at the following hours, viz.: breakfast at eight o'clock; dinner at one o'clock; and supper at six o'clock;—and during the winter six months at the following hours, viz.: breakfast at nine o'clock; dinner at two o'clock; and supper at half-past five o'clock.

XIV.—On the admission of a patient the resident medical superintendent, or, if he shall be absent on leave, the consulting and visiting physician, shall make himself acquainted as far as possible with the history of the case, and note the same down in the general registry; he shall also examine into the bodily condition of the patient, who is to be placed in an appropriate division, and carefully attended to, both medically and personally.

XV.—Patients may be visited from time to time by their friends, with the permission of the resident medical superintendent, and as a general rule between the hours of 12 and 4 o'clock, P.M.

XVI.—No patient shall be discharged without an order from the board, on a certificate signed by both medical officers, stating the then mental condition of the patient; and no lunatic transferred to an Asylum from gaol, by warrant of the Lord Lieutenant, as dangerous, shall be set free or handed over to his friends as ceasing to be dangerous, except on a joint certificate to that effect, from both medical officers; but in the interval between the meetings of the board it shall be in the power of the inspectors, or one of them, to order the discharge of any patient (not being a criminal lunatic placed in the asylum under an order of the Lord Lieutenant); but no such order shall be made, except at the request of the resident medical superintendent, until after a personal inspection of the patient by the inspector making it; and in every case the order shall be in writing, stating the grounds on which it is made, and shall be deposited with the resident medical superintendent, to be kept by him among the records of the asylum.

XVII.—On the discharge of patients who have no available means, the board is authorised to allow the expense of their journey home.

XVIII.—Patients confined in the central asylum at Dundrum and removable therefrom, under the 12th section of 8 & 9 Vic., cap. 107, shall, if insane, at the expiration of their period of imprisonment, and if liable to be treated as pauper lunatics, be transmitted after due inquiry by the inspectors, to the district asylum, to which, as pauper lunatics, they shall appear to have been admissible previous to their being taken into custody. In the absence of any such definite information, they shall be transferred to the district asylum of the locality, in which the offence with which they were charged was committed. Lunatics so transferred to district asylums may be discharged therefrom by order of the board of each asylum, as if they had been originally admitted by it.

Resident Medical Superintendent.

XIX.—The resident medical superintendent shall be duly qualified as a physician and surgeon.

XX.—He shall superintend and regulate the whole establishment, and is to be intrusted with the moral and general medical treatment of its inmates, for whose well-being and safe custody he shall be responsible; and he shall at all times devote his best exertions to the efficient management of the institution.

XXI.—He shall engage all servants and attendants, subject to the approbation of the board; and fine, suspend, or with the sanction of the board or inspectors, dismiss them for infraction of rules or neglect of duty. In cases, however, of drunkenness, insubordination, or cruelty, he may peremptorily dismiss any attendant, reporting the name of the party and the cause of dismissal to the inspectors within four days, and to the governors at their next meeting. He shall take care that no servant or attendant be engaged by him who is under twenty-two or over thirty-six years of age, and who has not the most satisfactory testimonials as to sobriety, good temper, and morality.

XXII.—He shall, before one o'clock, P.M., inspect the whole establishment daily,—dormitories,—dining-rooms,—kitchen,—laundry,—stores, &c. He shall go through all the divisions, and see that they are orderly, well ventilated, and of a proper temperature. He shall carefully examine each patient who may seem to require his advice, or to whom his attention may be directed. When going round the female divisions he shall be accompanied by the matron or head nurse, who shall direct his attention to any matter worthy of notice.

XXIII.—He shall take care that all the officers of the institution acquit themselves of their respective duties, and in any case of their neglect, he shall report accordingly to the board at its next meeting.

XXIV.—He shall also visit the male divisions after the patients have retired to rest, and satisfy himself that they are safely and comfortably located for the night.

XXV.—In complicated or difficult cases of mental disease, or any case requiring particular treatment, he shall freely communicate with the consulting and visiting physician, and concert with him the most judicious mode of treatment which should be adopted.

XXVI.—He shall never be absent from the asylum at the same time with the matron, nor ever for the night without special leave from a board of governors or the inspectors, and upon every such absence he shall enter in the book the date and period; and inform the consulting and visiting physician, who for the time shall exercise a general supervision over the establishment.

XXVII.—He shall be careful that the following books are kept with regularity, and that they are at all times ready for inspection, viz.—

1. The General Registry.

2. The Registry of Discharges and Deaths.
3. The Medical Journal.
4. The Morning Statement Book, which shall contain a return of the number of patients divided according to their sex and chargeability,—the names of those admitted and discharged, specifying their mental condition,—the names of those who have died,—the number employed,—the names of those who may be under mechanical restraint or seclusion, and the causes thereof,—the number under medical treatment,—the hour and duration of visits of the respective officers, to be recorded by themselves. The daily return to be countersigned by the resident medical superintendent.
5. The Want Book, in which, previous to each monthly meeting, all articles required for the use of the asylum shall be entered for the approval and signature of the chairman.
6. The Minute Book, containing a full and faithful record of the proceedings of the board.
7. The Letter or Correspondence Book, in which shall be entered the dates of all letters received, and copies of all letters written on business of the institution.
8. The Application Book, in which shall be entered the particulars of the several applications for admission.
9. The Memorandum Book for such observations and reports as any of the governors or officers may think necessary to insert in it.

XXVIII.—He is to take care that the minutes of each meeting are fully and accurately transcribed; that all communications directed by the board are written, and despatched in due course; that any returns or information required by the inspectors be furnished to them without delay; that all accounts of the institution are kept in accordance with the regulations of the inspectors; and that the bills and vouchers are regularly prepared and submitted to the governors at their meetings. He shall be responsible for the disbursement of such money as may be placed in his hands by the board.

XXIX.—All contracts and bonds of agreement shall be made in his name, and he shall exercise a general supervision over the various articles contracted for as to quantity and quality; and if of inferior quality or deficient in quantity, he is authorised, should he feel fully justified in so doing, to procure an equivalent supply elsewhere at the contractor's expense.

XXX.—He shall report at each meeting on the general condition of the establishment, and direct the attention of the board to any matter that may tend to the well-being of the patients, and the efficient management of the institution.

XXXI.—He shall prepare annually, not later than the 31st of

January, a general report to the board on the condition and expenditure of the asylum during the preceding year, which shall be published as the board may direct.

Consulting and Visiting Physician.

XXXII.—The consulting and visiting physician shall attend at the asylum three days in the week, and on every day in those asylums where the number of patients shall exceed 200; the regular hour of attendance being in the interval of from ten to one o'clock, unless otherwise arranged, by mutual consent, between the medical officers. On his arrival he is to communicate with the resident medical superintendent, in company with whom he shall visit all patients labouring under bodily disease, whose course of treatment he shall direct, and any who are in seclusion, or under restraint. He shall also see such patients as may have been admitted since his preceding day of attendance, and any others whom he may desire to visit.

XXXIII.—He shall attend at all times when called on by the resident medical superintendent, and afford such advice and assistance as may be required of him, whether to patients, officers, or servants, and daily in cases of acute illness, and accidents of a dangerous nature. He shall, once, at least, in each fortnight, examine with the resident medical superintendent, into the mental condition of every patient in the asylum.

XXXIV.—He is on every day of attendance to enter in the morning statement book the hour and duration of his visit.

XXXV.—When requiring leave of absence, he shall make application to the board, in order that, if it be deemed necessary, a duly qualified substitute may be provided in his place.

XXXVI.—In conjunction with the resident medical superintendent he is to examine into the mental condition of every patient before being discharged, and consult with him thereon, before signing the necessary medical certificate. Should the inspectors deem it advisable, the consulting and visiting physician shall attend daily at any asylum, irrespective of the number of patients in it, and afford them any information they may require.

XXXVII.—In every asylum a case book shall be kept in the office, in which the history of important cases shall be entered, with such observations as the medical officer in immediate charge of them may consider useful and interesting.

XXXVIII.—When a surgeon is specially attached as *such* to a district asylum, he is to attend on accidents of a serious character, perform operations when necessary, and take charge of cases purely surgical. The patients under his immediate care should, if possible, be treated in the infirmary, and his visits are to be regulated as those of the consulting and visiting physician.

Chaplains.

XXXIX.—When no regular chapels are attached to an asylum the board shall direct a suitable place to be temporarily allocated to religious worship.

The chaplains are to attend on Sundays and holidays to officiate according to their respective creeds. They are to visit the institution once in the week, at least, to administer religious instruction to those who, in the opinion of the resident medical superintendent, may be susceptible of its influence. They are sedulously to avoid all subjects of controversy. In case of illness they shall attend when called on. Each chaplain is to keep a book at the asylum, giving the result of his religious ministrations, to be submitted to the board at its meetings, and to be retained in the office.

The Matron.

XL.—She shall reside constantly in the asylum, and shall exercise immediate superintendence over the female department, but in position and authority subordinate to the resident medical superintendent, to whom she is to report daily its condition, and any irregularity or misconduct that may occur within it.

XLI.—She shall take care that cleanliness, both in person and dress, is strictly attended to, and shall have particular regard to the rooms in which sick, refractory, or idiotic patients are confined.

XLII.—She shall employ the female patients as advantageously as possible to themselves and to the establishment, and in every way endeavour to promote their comfort and well-being.

XLIII.—She shall examine the different apartments in the female divisions every day before eleven o'clock; and shall walk through the corridors after the patients have retired to bed, and see that every patient is safely and comfortably located for the night, and that the nurses are in their proper divisions.

XLIV.—She shall accompany the resident medical superintendent and the consulting and visiting physician when visiting the female division of the asylum, and receive from either of them any instructions he may deem advisable as to the treatment of the patients.

XLV.—She shall look after the inner clothing, bedding, linen, &c., &c., of the patients, see that they are kept in good repair, and shall take care that, without waste, there is a regular supply of sheeting, stockings, shirts, &c., &c. When she notices a deficiency she shall apply, by a written requisition, to the resident medical superintendent for such articles as may be required, and for which she shall be accountable on their receipt from the storekeeper, to whom she shall return all condemned or worn-out articles, to be disposed of by order of the board.

XLVI.—She shall pay strict attention to the state of the laundry, and to the order and regularity in which it is conducted, and exercise a general superintendence over the culinary department, the cleanliness of the dairies, pantries, &c., &c.

XLVII.—At meal hours she shall inspect the female refectories, and promote habits of regularity, decorum, and cleanliness among the patients, and due attention on the part of the nurses.

XLVIII.—The matron is to consider herself an officer of great trust, and must sedulously watch over the good conduct and becoming demeanour of the female servants and attendants. She shall not absent herself from the asylum at the same time as the resident medical superintendent; nor at any time without the special permission of the board or the inspectors.

The Apothecary.

XLIX.—He shall attend daily at the asylum before two o'clock, or whenever required by the resident medical superintendent. He is to compound all prescriptions, entering them in the general prescription books in full, and inscribe the necessary directions on each parcel legibly. He shall take care that all medicines not used or which shall be counter-ordered shall be returned to him. He is to assist in the infirmary, or in any other part of the institution where his services are needed, but shall not prescribe for patients.

L.—He is to take stock twice in the year, and make requisitions to the board through the resident medical superintendent. Surgical instruments and those employed for restraint are to be kept in the apothecary's shop, to which no person unauthorised by either of the medical officers shall on any pretence whatever have access in his absence.

Clerk and Storekeeper.

LI.—He shall attend daily in the office, under the directions of the resident medical superintendent, and take charge of the various books in it. After each meeting he shall make an accurate transcript of its proceedings, to be signed by the chairman of the next board. He shall copy letters written on official business, and file those received. He shall keep all accounts, examine receipts and vouchers, see that the bills are in accordance with the contract prices, and have them in order and readiness, to be submitted at the usual meetings.

LII.—He shall have charge of the stores of the institution, and receive the same, and be accountable for the quantity and quality, so as to show the issues of every sort, ordinary as well as extras, and check the issues and consumption with each other.

LIII.—He shall keep an account of the clothing, both male and

female, exhibiting in a clear manner the quantities from time to time received, the articles delivered out, together with the divisions in which such articles have been supplied, and is on no account to issue any articles from store in lieu of any other article of the same kind, without a written order (to be filed) from the resident medical superintendent or matron.

LIV.—He shall keep an account of the receipts and issues of coals, candles, soap, &c., &c., also an inventory of the furniture, beds, bedding, house linen, &c., &c.

LV.—He shall sign the pass-books kept by the various contractors for milk, bread, meat, &c., &c., on the delivery of each article, and is also to keep a pass-book to be signed by the contractors, in which the quantity delivered shall be entered.

LVI.—He shall attend for the issue of stores; and in the daily delivery of food to the cook he shall take particular care that the quantity is proportionate to the demand in the different divisions as specified in the dietary book, and that ample time is allowed for the cooking and preparation of the various meals.

LVII.—He shall, as far as possible, see that no misapplication of food or other articles occurs after having been issued from the stores, and is from time to time to observe the male patients at their meals, and judge whether they have received their regular allowances. Twice in every year, viz., in March and October, and oftener if required, he shall take stock under the direction of the board, and make out an accurate return in detail, of the aggregate receipts and issues during the preceding six months, or any other required period.

Servants and Attendants.

LVIII.—The servants and attendants, both male and female, shall be directly responsible to the resident medical superintendent, and shall observe habits of cleanliness, order, and subordination, as well as the most unvarying kindness towards the lunatics placed under their charge.

LIX.—They shall never absent themselves from their divisions so as to leave the patients unguarded, nor shall they attempt mechanical restraint, seclusion, or the use of the shower or plunge bath, without express direction from either of the medical officers. The presence of a servant or attendant, in the case of baths being given, shall be imperative.

LX.—In the morning they are to see that the patients are properly washed and dressed, and at night that due regard be paid to their comfort.

LXI.—They are to be present when the patients are at meals. They shall pay particular attention to the clothing and becoming

appearance of the patients ; and shall contribute all in their power, both in and out of doors, to their amusement and occupation.

LXII.—They shall be answerable for the safe keeping of the lunatics under their care, and in the event of escape, attributable to any negligence on their part, shall be liable to a fine, or to dismissal.

LXIII.—At the male side they shall report daily to the resident medical superintendent, the conditions of their respective wards and corridors ; at the female, to the matron ; and shall keep a diary in reference to the patients.

LXIV.—They shall, in their communications with the medical officers and matron, state all the circumstances relating to each patient within their knowledge, and study, as much as possible, the character and peculiarities of the different lunatics under their charge.

LXV.—They are to be responsible for the cleanliness and care of bedding, linen, &c., &c., in their respective divisions, and when repairs are wanted, shall report the same ; at the male side, to the resident medical superintendent, at the female, to the matron.

LXVI.—They are to deliver out the foul linen of their divisions to the laundress on the appointed days with a docket, specifying the description and number of articles, and are to compare the docket with the clean linen when returned, and are to report any neglect on the part of the laundress.

LXVII.—They are to keep their own presses and private rooms in a state of regularity and cleanliness.

LXVIII.—No servant or attendant is to be permitted egress from the institution, without the sanction of the resident medical superintendent, or in his absence, if a female, of the matron, if a male, of the clerk and storekeeper, with the sanction of the consulting and visiting physician, by a written pass ; and on no account are the children of any domestic to reside in the asylum.

LXIX.—They are on no account to receive any perquisites, either in money or value, from patients, or from the friends of patients admitted to the asylum ; any infraction of this rule is to be followed by immediate dismissal.

LXX.—They are to avoid any harsh or intemperate language to patients, and must, by steadiness, kindness, and gentleness, endeavour to contribute to that system of moral government upon which the value of the asylum depends.

The Cook.

LXXI.—The cook shall take care that in the morning before half after seven o'clock, the kitchen be in regular order, the fires lighted,

and everything prepared for her business: she shall receive from the storekeeper the different articles to be prepared as food for the patients and attendants, and be particular as to the quantity required; it shall be her duty to see that the meals are properly dressed, and ready at the particular periods specified for delivery.

LXXII.—She shall keep all the utensils employed by her with the greatest cleanliness, and never omit, before retiring to rest, to have the boilers well scoured, and the kitchen and scullery thoroughly ventilated and purified.

LXXIII.—She shall not allow loiterers, whether patients or attendants, to remain in the kitchen.

The Laundress.

LXXIV.—The laundress shall take charge of the patients employed to assist her, and, when their business is over, shall see that they return to the safe keeping of the attendants in their respective divisions.

LXXV.—She shall keep a book, to be called the “Laundry Book,” in which are to be entered, under separate heads, the various articles, soap, blue, starch, &c., &c., received by her from the storekeeper; and also a book containing an exact list of the foul clothes to be washed and returned by her weekly to the different divisions; any requisition or cause of complaint, in her department, is to be conveyed by her to the matron.

The Porter.

LXXVI.—The porter shall have charge of the hall and adjoining public apartments, and have them kept with neatness and order; also the entrance and grounds immediately in its front.

LXXVII.—In the morning, during the summer months, he shall, at half-past five o’clock, ring the bell to call up the servants and attendants; during the winter, at a quarter before seven.

LXXVIII.—At night he shall see that all the doors are locked, and the different yards duly protected, in summer, at nine o’clock, P.M.; and in winter, at eight, P.M. He shall then deposit all the keys intrusted to him with the resident medical superintendent.

LXXIX.—When called on he shall assist in taking charge of the male lunatics, under the directions of the resident medical superintendent, and render himself generally useful.

Land Steward and Gardener.

LXXX.—He shall attend at the hours named by the medical superintendent to receive the different classes for their respective labours.

LXXXI.—He shall take charge of all the implements used on the farm, and be accountable for them. He shall superintend the lunatics when employed on the grounds, and assist the attendants generally in the care of them.

LXXXII.—He shall make no purchase whatever of seeds, shrubs, &c., &c., neither shall he employ hired labourers without directions to do so from the board.

LXXXIII.—He shall keep a book containing an account, from month to month, of the expenditure on the faam and garden, and of the produce thereof; he shall enter in it the number of patients employed, as well as the amount of vegetables delivered by him daily for the use of the asylum.

LXXXIV.—He shall be responsible for the neatness, order, and cultivation of the grounds, and the good condition of the farm.

LXXXV.—He is to obey all orders he may receive from the resident medical superintendent, in regard to the patients under his charge, and in no case absent himself from his duties without leave.

Gate Keeper.

LXXXVI.—He shall take care that the gate-house and ground adjoining it, are at all times kept in a state of neatness and order.

LXXXVII.—He shall not admit any stranger without entering the name and the object of the visit, neither is he to permit any servant belonging to the asylum to go out, except on a pass, with the name of the party inscribed thereon, signed by the resident medical superintendent, or in his absence, by the matron or clerk, with the sanction of the consulting and visiting physician.

LXXXVIII.—He shall enter the date of all passes, together with the hours of return in the gate porter's book, which is to be brought up every morning to the office for the examination and signature of the resident medical superintendent, without whose sanction no admittance or exit shall be allowed to any non-resident officer or servant except through the public entrances.

LXXXIX.—He shall be at all times most cautious in guarding against the unauthorised introduction of spirituous liquors or cordials of any kind, or any other article which may be prohibited by the board, and shall promptly report to the resident medical superintendent any case of impropriety of conduct which may come under his observation.

XC.—In case any misunderstanding shall occur between the officers attached to an asylum with reference to their respective duties, and the mode of carrying them out, or to the meaning of the foregoing rules, the subject of misunderstanding shall be referred to the inspectors, who are to communicate their decision to the board of governors.

XCI.—No question relating to increased expenditure, to alterations in the staff or management of an asylum, to the sub-division of old or creation of new offices, or to any other subject of importance, shall be taken into consideration, without a month's previous notice; and no resolution of the board affecting the discipline or management of an asylum as established by the present rules, shall take effect, if contrary to any of them; nor, though conformable thereto, until after it shall have been submitted, through the inspectors, to the chief or under secretary, and shall have received the approval of the Lord Lieutenant.

XCII.—In any district lunatic asylum in which the person at present holding the office of manager is not a medical man, the foregoing rules shall not come into operation until he shall cease to hold that office; and, in the mean time, the rules hereinbefore recited shall remain in force in such asylum.

Given at the Council Chamber, in Dublin, the 16th day of January, 1862.

MAZIERE BRADY, C.
ROBERT PEEL.
N. BALL.
R. KEATINGE.
JAMES HENRY MONAHAN.
JOSEPH NAPIER.

WILLIAM KEOGH.
J. D. FITZGERALD.
R. DEASY.
G. BROWN, *General*.
THOS. O'HAGAN.

On the Practical Use of Mental Science.—By J. STEVENSON BUSHNAN, M.D., Fellow of the Royal College of Physicians of Edinburgh; late Senior Physician to the Metropolitan Free Hospital; Resident Proprietor of Laverstock House Asylum, near Salisbury.

(*Read before the Southampton Medical Society, 4th February, 1862.*)

MENTAL Science, in the forms under which it usually exhibits itself, is a subject of extreme generality. It deals with the phenomena of consciousness, as these are common to the whole human race. It hardly takes into account those peculiarities of the mind, from which individual character is formed; nevertheless, in the practical application of mental science, it is with individual character that we are for the most part engaged. Shall we, then, conclude that the prevailing systems of mental science afford no insight into

the practical uses of that science? Certainly not—and for this very sufficient reason, that the peculiarities of individual minds bear but a very small proportion to the operations which arise in obedience to laws affecting all the sound-minded members of our race. Hence, in the study of the practical uses of mental science, while it is incumbent upon us to fix a strict attention on the general laws of thought, means must at the same time be sought to bring to light the limits of the range, within which these laws, in particular minds, suffer modification.

In short, the chief practical use of mental science is to enable us to deal with and to influence individual minds. Let a man be ever so well acquainted with his own mental constitution, he will have made but very small progress in the means available for a practical psychology. He may, indeed, have become thoroughly conversant with all the mental phenomena, which are common to him with the whole human race; but if he has studied himself only, he will run a great risk of falling into the error of including his own mental peculiarities among the universal laws of human thought. It is true that the study of mental phenomena by reflexion on the subjects of one's own consciousness may serve greatly to extend the reach of thought, and to give acuteness to the intellectual faculties; but no pains taken in this direction will suffice for the attainment of a knowledge of human nature in the sense of an acquaintance with individual character. To reach such a knowledge, the student must apply himself to the observation of individual men, and his progress will be proportionate to the opportunities which he may enjoy of a large intercourse with society under ever-varying circumstances. Nor can there be any doubt that an intimate familiarity with the general principles of scientific psychology will initiate him in the readiest modes of turning such opportunities to advantage, and serve to abridge the labour of perusing the hidden lines of thought, and the startling peculiarities of motive unceasingly offered to his attention. He already knows that, in obedience to the general laws of human thought, every act of mind must be introduced by a previous act of mind, and what he wishes to learn is what are the ordinary links in every man's prevailing currents of thought. He must now be content to acknowledge that, when he was taught that all the relations of thought could be reduced to such heads as contiguity in time and place, cause and effect, and the like, he was made acquainted merely with the alphabet of that language which he is now striving to read—and that, before he can attempt to determine what course of thought will arise under given circumstances in the mind of any individual, he must have had the means of ascertaining something of the modes in which that man's thoughts are accustomed to array themselves.

Thus practical psychology, as superadded to scientific psychology,

might be described as the exercise of converting the general laws of suggestion, laid down by metaphysicians, into particular instances, falling under those laws, discoverable by the study of the individual minds of men throughout human society. This is a kind of pursuit which will encounter the reproach of being wholly opposite to inductive science. Nevertheless, it is a mode of investigation which in many departments of knowledge is essential to reaching the truth. It is far from being unknown even in natural history. How many well-distinguished groups, both in the vegetable and in the animal kingdom, have been made out of what seemed at first to be but one perfect family—how many species out of what seemed at first one well-marked species? In the mineral kingdom, look at such words as *spar* and *gem* which were originally employed each to signify a small group of resembling stones; yet how has each multiplied into a vast family but by a more and more particular scrutiny of each of the older members of the two groups? Turn to political economy—how many general laws, which at one time appeared complete and incontrovertible, have by the larger and larger investigation of special cases been broken down into almost endless details. And to a more limited extent, the same is true of the principles of morals.

Parse, so to speak, any particular example of a train of thought by the rules of suggestion, such as contiguity of time and place, cause and effect, and the like—nothing is easier than to dissect the train into its several members and to state the category under which each member falls. But reverse the case and reflect how far the train could be continued, were the first member only given, by any amount of consideration of these rules of suggestion. Witness such a string of thoughts as the following, taken almost at random from Shakspeare:

“PISTOL.—Then you, Mrs. Dorothy; I will charge you.

“DOROTHY.—Charge me? I scorn you, scurvy companion. What! you poor, base, rascally, cheating, lack-linen mate! Away, you mouldy rogue. Away, you cut-purse rascal! you filthy bung, away! By this wine, I’ll thrust my knife in your mouldy chops, an you play the saucy cutter with me. Away, you bottle-ale-rascal! you basket-hilt state-juggler, you! Since when, I pray you, sir? What, with two points on your shoulder? much! Captain! thou abominable damned cheater, art thou not ashamed to be called Captain? If captains were of my mind, they would truncheon you out, for taking their names upon you before you have earned them. You a captain, you slave; for what? He a captain! Hang him, rogue! He lives upon mouldy stewed prunes and dried cakes. A captain! These villains will make the word captain as odious as the word *occupy*, which was an excellent good word before it was ill-sorted; therefore captains had need look to it.”

It were very needless to point out how special the links of sug-

gestion are in a discourse like this. They fall indeed under the general laws—but they are so peculiar as to be thoroughly the property of the individual mind. Nevertheless, it belongs to practical psychology to make an approach at least to anticipating such a train of thought as that just cited, when the prevailing turn of the individual mind has been indicated.

How, then, are we to proceed to gain insight into the links of suggestion which are customary in individual minds? It is to be understood that a preliminary step is an acquaintance with all that scientific psychology teaches concerning the nature of human feelings, thoughts, emotions, and passions. After this preparation, in the following enumeration will be found some of the most obvious means, by which a greater and greater facility of penetrating into the recesses of other men's thoughts may be acquired. Among these means stands pre-eminently the careful scrutiny of the characters of those, whose minds are specially laid open to us in the intercourse of life. I would next mention the selection for frequent study of those systems of scientific psychology, in which the principle of suggestion plays an unusually prominent part. Of this description in particular is the system of Dr. Thomas Brown. I would in the third place direct attention to the consideration of the question, how far certain physiological conditions of the living body are capable of modifying trains of thought. I would lastly point out what a boundless field for exercise in the elements of individual character is presented in literature, whether imaginative, or historical and biographical, as well as in the annals of crime as found in the judicial proceedings of every country. To the illustration of these several topics I now proceed.

If a minute could be made of all the operations of a man's mental nature from the earliest period of consciousness—a considerable time probably before birth—down to the last consciousness which preceded death; and if this could be done with respect to any large number of individuals, what a curious set of psychological pictures would be obtained! We should be able to trace minutely the several steps in the development of the infant mind; the rise of fundamental thoughts—some inspired by instinct, some wrought out by rudimentary reasoning; the daily growing knowledge in the child of the component parts of his own frame; his gradual approach to the discovery of the broad line of demarcation between self and an external world; the wonder of the boy as the nature of the things around thickly flashes upon his view! Then would appear the beginnings of the nice variations of individual character which show themselves so early in the period of youth—the bents, the dispositions, the secret thoughts, with the modes in which these are nourished by external circumstances—the seeds of the good and the evil of the after-character in manhood. Then what a singularly

vivid anatomy of the man's spirit would be presented ! what secrets revealed in reference to the prime and latter stage of life ! What a commentary would such minutes be on the lucubrations of our poets, our moralists, our philosophers ! how would it illustrate these ! how would it transcend them all !

If then it be self-evident that the possession of such pictures of the human mind and character would be of invaluable service to all whose business it is to deal with human nature—and in particular to the legislator, the divine, the lawyer, and the physician—it deserves consideration to what extent that science should be held in estimation which, in default of such a gift in all its perfection, has for its object to present pictures of the same kind, if not complete, yet in large and unmistakeable fragments. That science is Psychology. It rests upon such minutes of the human mind and character as individuals, in all time past, have been able to supply from their personal experience ; that is to say, from the observation of self. Inferior as psychology necessarily is to the pictures I have supposed, it makes the nearest approach to them in point of utility which men can possibly reach, and the more it is cultivated the nearer it absolutely identifies itself with them. Psychology exhibits, in a very complete manner, the general plan on which the operations of the human mind proceed ; while the acknowledgment of inferiority which must be made on its behalf, in comparison with such a gift as the pictures I have supposed, refers chiefly to what is of the last importance—the numerous peculiarities of individual minds. There can be no doubt that the value of the pictures would lie essentially in their vivid representations of peculiarities, such as the descriptions of psychology have hitherto embraced to a far too limited extent. But this particular department—that is, the peculiarities of mind in individuals, both belongs to psychology and, with due discrimination, is, beyond doubt, capable of extensive cultivation. It is, in short, the practical part of psychology, and, as such, is directly available for the purposes of all who, in the business of life, are required, to any large extent, to study human nature. If it be plain, then, that the attainment of these pictures is beyond our reach, it is incumbent on all who feel the want of them to apply themselves to psychology, and to make it their endeavour to enlarge that part of the science which relates to the peculiarities of individual minds.

But, before proceeding farther in this line of discourse, let us recur, for a few moments, to the supposed minutes and pictures of the operations of mind throughout the lives of a number of individuals, with a somewhat different purpose. Though such a picture cannot be produced in the full perfection of its details, yet a fair outline of it can be imagined, and it is such an imaginary outline which psychologists make use of in their attempts to methodise the phenomena of the human mind by reducing them to groups. This

methodising or grouping of mental operations, and the settling of the rules which, more or less, certainly determine the order of the succession of such operations, constitute psychology proper. The method of arrangement, and the laws or rules referred to, have been viewed in different lights by different authorities; and, indeed, the cultivation of psychology should not be regarded so much as being the mere study of the mode of grouping mental phenomena and the laws of their succession adopted by particular authors, but rather as being the consideration of the imaginary pictures above referred to and the practising of one's self in throwing the phenomena, now into one set of groups, now into another set, according to every discoverable kind of tie or relation between them.

It is often made a complaint against psychology that so many different methods of arranging the phenomena of mind prevail in the works of the most esteemed authors. It is, doubtless, an inconvenience that the nomenclature is not more fixed, and, in so far as words are used in different senses by different authors, there is good ground for complaint. But it is quite possible that writers on psychology may vary their methods of arrangement, without confusing their readers by employing words otherwise than in their ordinary and received sense. With this restriction, there can be little doubt of the advantage which has resulted to psychology from the attempts of authors to throw mental phenomena, now into one set, now into another set of groups. It is not even necessary for the advantages attainable by the frequent variation of these groups of phenomena, that the principle on which the methods proceed should be absolutely correct; for more distinct views are often obtained by looking at such phenomena in every aspect in which they can present themselves, than by confining our attention to that aspect which is nearest the truth. For example, there are serious objections sometimes urged to representing all the operations of which mind in its largest sense is susceptible as so many states of mind, or so many states of consciousness. Nevertheless, it cannot be doubted that that mode of speaking has had, in a particular degree, the effect of clearing away the confusion caused to the student by the terms faculties, powers, feelings so currently used in the older modes of arrangement. In short, so long as consciousness was described as a mental faculty, co-ordinate with memory, imagination, judgment, and the like, there was a fertile source of perplexity introduced into every arrangement of the mental operations in which consciousness held such a place. But since it has been generally taught that consciousness is not a separate faculty of the mind, but a condition attendant upon every sensation, feeling, thought, emotion, passion, volition—in short, upon every state in which the mind can exist, the unity of the substance mind is at once made apparent to the student, and the true nature of consciousness brought out, even if the phrase “states of mind” should be

subsequently abandoned and entirely left out of the arrangement finally adopted. I should remark, that in what has just been said the consideration of the new ideas which have sprung up as to unconscious cerebration is, for the present, postponed.

Again, though there are many valid objections to adopting the arrangement of mental phenomena proposed by Dr. Thomas Brown, yet there cannot be a doubt as to the study and debate of that arrangement being in the highest degree conducive to the clearer apprehension of the real character of phenomenal psychology. The part of Dr. Brown's arrangement to which I particularly allude, is that in reference to what he terms Intellectual states of mind. Dr. Brown regards all the intellectual states of which the human mind is susceptible as reducible to two conditions, namely, Simple Suggestion and Relative Suggestion. "Our perception or conception of one object," Dr. Brown says, "excites, of itself, and without any known cause, external to the mind, the conception of some other object, as when the mere sound of our friend's name suggests to us the conception of our friend himself; in which case the conception of our friend, which follows the perception of the sound, involves no feeling of any common property with the sound which excites it, but is precisely the same which might have been induced by various other previous circumstances, by the sight of the chair on which he sat, of the book which he read to us, of the landscape which he painted." This is Simple Suggestion. "There is a suggestion of a very different sort, which, in every case, involves the consideration not of one phenomenon of mind, but two or more phenomena, and which constitutes the feeling of agreement, disagreement, or relation of some sort. I see a dramatic representation. I listen to the cold conceits which the author of the tragedy, in his omnipotent command over warriors and lovers of his own creation, gives to his hero, in his most impassioned situation; I am instantly struck with their unsuitableness to the character and the circumstances." ('Brown's Lectures on the Philosophy of Mind,' vol. ii, p. 179.) This last is one of Dr. Brown's examples of his Relative Suggestion. Again, he says, "With these two capacities of suggested feelings, simple and relative—which are all that truly belong to the class of intellectual states of the mind—various emotions may concur, particularly that most general of all emotions, the emotion of desire, in some one or other of its various forms. According as this desire does or does not concur with them, the intellectual states themselves appear to be different; and by those who do not make the necessary analysis, are supposed, therefore, to be indicative of different powers. By simple suggestion, the images of things, persons, events, pass in strange and rapid succession; and a variety of names, expressive of different powers,—conception, association, memory,—have been given to this one simple law of our intellectual

nature. (Ibid. 180, 181.) Again, "Whether the relation be of two, or of many external objects, or of two or many affections of the mind, the feeling of this relation, arising in consequence of certain preceding states of mind, is what I term relative suggestion; that phrase being the simplest which it is possible to employ, for expressing without any theory, the mere fact of the rise of certain feelings of relation, after certain other feelings which precede them, and, therefore, as involving no particular theory, and simply expressive of an undoubted fact, being, I conceive, the fittest phrase." —(Ibid., p. 430.)

The arrangement adopted by Dr. Brown is well adapted both to illustrate the true nature of what have been termed powers and faculties of the human mind, and to point out the practical advantages of seeking to frame minutes or to delineate pictures of what passes in the mind during trains of thought.

Dr. Brown objects to the phrase "association of ideas," maintaining that successive states of mind are suggested and not associated. If the association of ideas be regarded as including all the circumstances which determine the succession of mental states in what is called a train of thought, the notion that phrase conveys is undoubtedly too limited. When we hear the name of a friend pronounced and the appearance of that friend immediately rises to the mind, there is unquestionably a connexion between the two states which is entitled to the name of an association; for the two phenomena have often existed together, simultaneously, or in succession, in the mind before, or have been associated. But when I look at the portrait of a stranger for the first time, and that portrait seems to have a resemblance to a particular friend, whose appearance immediately rises into my mind, there is obviously no association, but only a suggestion, since the stranger's features and the appearance of my friend never before co-existed in my mind. Suggestion, it is plain, applies to both cases, and therefore, unless it be desirable to keep the two cases distinct, it is the preferable word.

The laws of suggestion taken as a whole, to which the train of our subject here draws us, carry us into the very pith and marrow of practical psychology. The startling proposition—and it is not less true than startling—here is, that man has no voluntary power over any one thought. Every present state of mind is the suggestion of some previous state of mind; nevertheless, thoughts do not succeed thoughts like a long chain of connected events in physical nature; they do not follow each other under definite impulses like wave upon wave. Among the many states of which the human mind is susceptible, there are the states of volition and desire and these states have other states of mind for their objects, so that volition and desire, as it were, over-rule and control the ordinary rules of suggestion, and thus a man, by the regulation of volition and desire

may become in a great measure master of his thoughts. Besides the influence, however, of the states of mind of which a man is conscious, in the determination of the succession of thought, there is reason to believe that organic states of the living frame sometimes, to a greater or less extent, assume the mastery.

Nothing is more familiarly known than the effect of what are called good and bad, high and low spirits on the trains of thought in individuals. Good and bad, high and low spirits are obviously merely organic or purely physiological states of the living body. In certain temperaments high spirits, in certain other temperaments low spirits are habitual. High spirits and low spirits are expressive terms, but in the present day have no physiological signification, being merely a bequest from the language of a physiology of former times. They correspond, however, without doubt, to organic conditions of the system dependent on variations in the activity with which some of its important functions are performed. Here, then, it is manifest that the laws of suggestion, as respects the succession of states of mind, are over-ruled and modified by purely corporeal conditions of the living frame.

But there is an additional view on this subject which introduces us to a wholly different mode in which the succession of thought may be modified by purely organic causes. It cannot be doubted that every change in the current of thought is accompanied by a strictly corresponding change of a material kind in the nervous centre—by an alteration of some unknown description in the condition of the organic atoms composing the portion of the nervous centre concerned in the state of mind which has arisen. It is true that this change on the vesicular nervous matter, corresponding to successive operations of mind, has of late been regarded as merely a decomposition of part of the organic solid into its inert elements, or into an inert compound designed to be thrown forth from the system by some of its emunctories. If this were the sole change, it is not easy to see how any vestige of it should remain in the nervous system, such as could concur with the mental principle, in its after reproduction as a state which might be recognised as one previously present to the mind. But many considerations render it highly probable, if not certain, that the change, whatever it is, leaves some trace of a permanent kind behind it; and if this be admitted, a fertile cause is obtained of many phenomena in the succession of thought, under peculiar circumstances, not otherwise easily explicable. For example, let us attend for a moment to the phenomena in febrile delirium, in intoxication, in dreaming, and the like. What an activity of mind is often discoverable in febrile delirium!—for fifteen or twenty days an almost unceasing outpouring of disjointed thoughts may occur, often of the most extravagant character, where perhaps no two could be said to have become connected by a previous coin-

cidence in the mind during health. In the stillness and darkness of the sick chamber during a severe attack of fever, there are few impressions made of a kind to originate vivid sensations, while the sensations arising from local bodily disturbances are of a very uniform character, so that there is absolutely nothing in the shape of impressions on the organs of sense correspondent with the variety and activity of the thoughts rushing onwards in mad career. What then is discoverable in such a case within the head to account for so great an activity of thought? There is an increased momentum of the circulation of the blood through the cerebral vessels, an augmented development of heat, and doubtless a more rapid decomposition both of the fibrous and vesicular nervous substances. There are, indeed, no facts from which we can infer that an increased impulse of the blood on the vesicular matter can call its function into activity; but as the fibrous matter is, like the nerves themselves, a conducting apparatus, a strict analogy cannot but subsist between them. Hence it is not improbable that the impulse of the blood on the conducting nervous substance within the head, just as the impulse of the blood on the optic nerve causes visual effects, may so affect the vesicular substance to which it extends as to revive or reproduce states of mind altogether independently of their original order and connexion. The proposition so deduced may be in other terms thus stated; every act of mind leaves behind it in the vesicular nervous substance a permanent material trace or effect—the existence of this trace is probably essential to the revival of that act of mind by suggestion, that is by means of another act of mind; but while it continues, it seems probable that if that trace or vestige be organically affected in some certain modes, the corresponding act of mind is revived contrary to the ordinary rule by suggestion. Could this mode of viewing the subject be established, it would be a step in advance of no small importance in the pathology of mental diseases. The idea is not only in strict analogy with the series of facts of which an instance from vision was given above, but is in general keeping with the laws of nervous action.

Again, in intoxication and dreaming, how many considerations are there in favour of the outrageous trains of thought, common to both, being the effect rather of material impulses on the nervous apparatus than of anything coming under the name of suggestion.

But to take up the bearing of the view started above on insanity. On the supposition that thought succeeds thought merely by suggestion, how inexplicable is the torrent of unconnected ideas which in many cases of mental derangement is uninterruptedly poured forth! If, on the contrary, it be found that every mental operation, sensation, perception, remembrance, or imagination leaves a material vestige in the nervous centre, which vestige being rendered active, at a future time,

by a merely physical impulse, can renew the corresponding mental operation, how close is the representation afforded by this view, to the phenomena of insanity. There can be no doubt that insanity depends, in every instance, on a deviation of the organism of the nervous centre from its normal condition. Too little is known of the intimate nature of organic parts to entitle us to say that insanity is in every case a real structural change on the nervous substance. The term "structural" should not certainly be employed unless in respect to changes which are within the range of the microscope. By which it is to be understood that merely inferred alterations of an organism are not to be described as changes of structure. In every organic part whether in health or disease there are molecular changes going on, and when such molecular changes are inferred to have become morbid, it seems at first sight reasonable to include them in the expression—morbid alterations of structure. But this is to destroy entirely the use of the old term "functional," as applied to diseases—which though perhaps never strictly correct in its original sense, is of great convenience. There still, is and probably will be for many years to come, room for the distinction of diseases into functional and structural, though it must be confessed that the structural every day makes new encroachments on the functional. As regards pathology it is surely not unreasonable to refuse to allow that a part is structurally changed, if after death the microscope cannot detect the alteration; and as respects practical medicine, it is not unreasonable to affirm, that that part has been only functionally affected if it return to its former state of a living solid, independently of suppuration or any like process.

While then, I say, that insanity depends in every case on a deviation of the organism of the nervous centre from its normal condition, I think it wrong, or at least premature, to say that every case of insanity is the result of an organic alteration. The numerous manifest morbid changes on the nervous parts within the head which have been detailed in cases of insanity by crowds of observers, as found after death, have thrown very little light on the actual state of the brain in that disease. No doubt there is a coincidence between great deprivation of the power of mental operation during life and extensive morbid change, as in fatuity and dementia. It can hardly be doubted that where the parts concerned in thought have lost their structure, the power of thought should be lost—but such cases throw no light on the aberrations of thought where the mental power remains in its fullest activity. It is quite probable, then, that when there is deprivation of mental power, morbid alteration is discoverable. But it is equally probable that where there is undue activity, there is only morbid organic action, and that, if after death in such a case there is extensive morbid alteration found, the latter is not the immediate but only the remote cause of the

disease by creating disturbance of action in adjacent parts of the brain. Here, then, is an ample field of investigation. It is manifestly an essential point in the history of every case of mental derangement to detect in what respects the patient has lost mental susceptibilities previously possessed, as well as to examine how far new activities have been developed. Again, it may be possible in many cases to determine by attention to the character of a patient's trains of thought how far it is probable that their current is determined by the ordinary laws of suggestion in health, or whether it is more probable that the prevailing course of mental phenomena is the result of physical causes acting within the brain on the vestiges left by previous mental operations.

The subject of *latent cerebration* which I passed over near the commencement of this paper, not unaptly concurs with the discussion in which we have been last engaged. The idea of "latent cerebration," or what may be termed thought out of the dominion of consciousness, manifestly took its rise from the doctrine of the reflex action of the nervous system. It is vain to deny that Marshall Hall first placed the doctrine of reflex action on a distinct and intelligible footing. There were floating ideas bearing on the subject for nearly a century before he announced his discoveries; but they did not take a sufficiently definite shape. It had long been observed, that an impression made on one part of the living frame was succeeded, as a rule, by a definite motion in some other part of the frame more or less distant. This fact was variously explained. Those who held that the impression on the first part was conveyed to the nervous centre, and that the motion took place by the effect of an influence transmitted from that centre to the second part, made the first step towards the acknowledgment of reflex action. The difficulty was to get rid of a sensation in respect to the impression, and of a volition in respect to the motion. This difficulty plainly arose and obstinately continued to present itself only because physiologists confined their attention too exclusively to the human body and its actions. Further, the difficulty was increased, because in some of the instances placed under the same head, a distinct sensation was discoverable as attendant on the impression, while no trace of a subsequent volition appeared. Thus in the case of the impression of a strong light on the retina, followed by a contraction of the pupil, there was a sensation consequent on the impression, but no volition could be ascertained to precede the contraction of the pupil, though that, beyond doubt, was the effect of muscular action. On the contrary, in the impression made by the presence of venous blood on the nerves of the lungs followed by the contraction of the numerous muscles concerned in inspiration, there was in ordinary cases, and, above all, during sleep, no trace either of sensation or volition. So clearly, how-

ever, was it seen that the impression made on one part was the cause of the motion in the other, in such instances as those just indicated, that for some time before Marshall Hall announced his mode of viewing the difficulty, it became common to speculate on what now seems an absurd notion, that there might be sensations without consciousness, in order to find something in the shape of a cause to interpose between the impression and the motion. What Marshall Hall really did, was to save physiologists from speaking of sensations without consciousness, or of volitions without consciousness. For what are his reflex actions but effects after impressions in all respects like to sensations, except in being unattended with consciousness, followed by effects in all respects like those of volitions, except in being unattended with consciousness? Accordingly, just before Marshall Hall announced his method, it had become common to resolve the phenomena of a sensation into: 1, an impression on a sensitive part; 2, a transmission of this impression along a nervous filament to the spot of the nervous centre with which that filament is connected; 3, an organic change in that part of the nervous centre; 4, a corresponding state of consciousness; and to resolve a volition into—1, a state of consciousness; 2, a transmission of an influence generated by that state of consciousness along a motor nervous filament; 3, an impression or stimulus made by that influence on the fasciculus of motor fibres on which it is distributed; 4, a movement by the contraction of that fasciculus. And it had become clearly seen by many physiologists that in respect to many acts, the state of consciousness was not essential either to the effect of what is now called the afferent nerve, or to that of what is now called the efferent nerve. (See on this subject ‘Bushnan on Instinct,’ p. 100, 101, Edin., 1837). This then was the origin of the doctrine which ascribes to the nervous centre an endowment by which acts, strictly analogous to mental acts, are performed, such as had before been believed to be essentially dependent on a conscious principle. Nor are these acts merely isolated movements—for in many instances the movements constitute the means applicable to extensive ends. What, for example, is more complex than the perfect act of vomiting in man? how many muscles distant from each other are called into simultaneous and concordant activity?—and yet all that large effect results from an impression made on the nerves of the stomach or of the upper part of the gullet. But as soon as such views became established in human physiology, it seemed at once manifest that the numerous instinctive acts of the animal world at large, by which so many important ends are accomplished, are precisely of the same character—that impressions are made on sensitive nerves, and that the movements necessary for the established end are produced by motor nerves.

It was not surprising that a new impulse should be given by such doctrines, so that even thought began to be regarded as, under some circumstances, independent of consciousness. Dr. Laycock claims the credit of having first taught the doctrine of a reflex function of the cerebrum, while Dr. Carpenter has adopted views in which thought is regarded as arising from the operation of certain parts of the brain unattended by consciousness. This is what Dr. Carpenter terms unconscious cerebration. The present is not an occasion to attempt to distinguish between the views of Dr. Laycock and those of Dr. Carpenter—it is enough that both teach, in the words of Dr. Carpenter—that much of our highest mental activity is to be regarded as the expression of the automatic action of the cerebrum, and that it may act upon impressions transmitted to it, and many elaborate results such as we might have attained by the purposive direction of our minds to the subject without any consciousness on our parts. “Looking,” he adds, “at all those automatic operations by which results are evolved without any intentional direction of the mind to them, in the light of reflex actions of the cerebrum, there is no more difficulty in comprehending that such reflex actions may proceed without our knowledge, so as to evolve intellectual products when their results are transmitted to the sensorium and are thus impressed on our consciousness, than there is in understanding that impressions may excite muscular movements through the reflex power of the spinal cord, without the necessary intervention of sensation.” (See ‘Laycock,’ vol. ii, Appendix.)

The subject of reflex action is one of the highest interest, and well deserves to engage our attention. It is, however, rather a part of physiology than of psychology, and the interest which attaches to it arises from the special offices which it assigns to certain parts of the nervous system. It does not develope any new line of thought—that is, any line of thought unknown to the old psychologists, who cultivated their science without so much as determining whether there were a material frame or no. They did not ignore genius, they did not ignore capacity, they did not ignore high talents, they did not ignore cleverness—and whence, their partisans will say, did the products of all these qualities of mind come?—surely they arose in the minds of the fortunate possessors without any consciousness of the source “whence they originated.”

Were numerous pictures of individual minds, such as were referred to at the commencement of this paper, within our reach, they would exhibit all those peculiarities which in literature constitute what is called character, whether in real history or fictitious writing. It will not be disputed that in the study of psychology, particularly in reference to the turn of thought in individuals, much is to be learned from those works of genius which owe great part of their celebrity to the faithful delineation of special character. Even the heroic

personages of Homer and Virgil, limited as the pictures of their thoughts are, are not without their use in the respect referred to. Achilles, Agamemnon, Menelaus, Æneas, Turnus, are so many well-distinguished characters, exhibiting particular turns of thought, in perfect accordance with psychological rules. Ulysses is Homer's most laboured character, and here undoubtedly a correspondingly large insight into human nature is afforded. Merely to touch on modern times, how infinite in number and variety are the lessons in the course of human thought, emotion, passion, to be gained from the pages of Shakespeare! Nay, even in the higher specimens of that large department of modern literature, the Novel, there is an incalculable amount of minute psychological instruction in reference to individual character. If any one express a doubt as to the accuracy of knowledge of this kind derived from such a source, the answer is—that kind of literature is, in fact, to a great extent a record of the individual experience of the writers in the intercourse of real life.

When from fiction we turn to the actual history of the world and of the men who have figured in the world, we find everywhere vast stores of psychological knowledge laid open. Here the utmost extremes of human character prevail. It becomes, indeed, a question on many occasions in real history whether the characters of which we read belong to the physiological or to the pathological department of human nature. In short, the perversity of some historical characters is such as to suggest the existence of mental derangement as the only solution of the difficulty. To discuss the crimes of history with a view to determine the soundness of mind of the actors, would be a very ungrateful task.

To these several considerations on the effect of physiological conditions of the living frame to modify trains of thought, I will only add, that the temperament of the individuals will sometimes furnish an important clue to the nature of the modification.

Nevertheless, in an age like this, in which frequent attempts have been made to infer the existence of insanity merely from the single perpetration of an enormous crime, such a discussion is by no means useless. When there is a distinct motive for a crime, however great—that is a motive which can be understood in an intellectual sense, and not the mere gratification of a morbid propensity—there is little difficulty in the case. Any amount of wickedness, for example, is perfectly compatible with the gratification of ambition, without subjecting the actor to the imputation of mental derangement. But when we contemplate the useless cruelties of a Nero, a Caligula, a Domitian, our faculties stand aghast at the spectacle, and refuse for awhile to resolve the question as to their cause. It has been thought by some philosophers, that Nero's career admits of an explanation; namely, that his two first great crimes, the

poisoning of his brother Britannicus, and the putting to death of his mother Agrippina, being of a political character, are explicable, and that thus his moral sense was blinded to the enormities of which he was afterwards guilty, often from the merest whim. The same kind of explanation is sometimes put forward for Domitian—but Caligula's case admits of no alternative but absolute depravity or insanity. This opens a wide field of psychological enquiry, into which our limited time forbids us to enter farther. I will only say, that it is to be feared that the plea of insanity cannot often be justly urged in behalf of great historical crimes. When the human character, originally bad, is freed from restraint by absolute power, and has once become familiar with blood, it seems, tiger-like, to know no bounds to the cruelty of which it is capable.

Fortunately history presents other aspects of the human character from which psychological knowledge can be drawn than the revolting aspect which we have just been considering. There, all that is great and good in human nature finds its place. On that the mind may dwell with complacency, while it drinks knowledge from a pure stream. And the same observations apply to the extensive records of biography.

Another fertile source of individual character for the study of practical psychology is the record, in every country, of criminal jurisprudence. The crimes of the infancy of society are chiefly acts of violence committed from such motives as find free scope in such a state of life. As society advances, new crimes become developed, and there even arises a population born to crime. The extent to which this hereditary tendency to criminal acts can be corrected, is a question of the utmost moment in a condition of the social state like that which at present exists in this country; nor can psychology denude itself of a large share in the settlement of that question. This is, however, too much a matter of detail for the present occasion. Again, when crimes of violence are committed in this age without sufficient apparent motive, there arises the nice question whether the criminal be or be not of sound mind. In such a question psychology has a large share—not in the determination of what the law actually is, but what it ought to be. Here there are three most important questions with all of which, though not by any means in the same degree, psychology is concerned. First, as to the evidence of the existence of insanity in the criminal; secondly, as to the amount of responsibility in the several forms of insanity; and, thirdly, as to the expediency of punishment in the insane. And in all these three cases it is manifest that it is individual character which is concerned.

I referred before to the tendency in our time to infer insanity merely from the magnitude of a crime committed without sufficient apparent motive. This tendency in the public mind seems now to

be on the wane. Some years ago it was at its height, but various circumstances have contributed to emancipate public opinion from the influence of some enthusiasts who were continually holding up the execution of persons of an eccentric character for capital crimes as instances of judicial murder. No one will expect to find such men as Ravaiillac, Fenton, Bellingham, quite like other men; the inquiry into their previous history will be sure to bring to light peculiarities of conduct or character such as excessive benevolence may interpret into indications of a tendency to mental derangement. But had such men been suspected of insanity before their crime, and an inquisition set on foot, the peculiarities of which they might have been found to be possessed would not have been held at all sufficient to warrant their being pronounced insane. This state of things would undoubtedly be found to exist in the major part of such instances. And if this be the case, the public are not fairly dealt with when crimes of this kind are committed. If a man confined in an asylum for the insane commit murder, he is unquestionably entitled to whatever mitigation of punishment the plea of insanity can afford. But if, being at large, he commit murder, the plea of insanity should not be accepted, unless the insanity be distinctly proved. In the former case, indeed, he cannot be tried, since the law holds insanity a bar to trial for any crime; but, in the latter case, it commonly happens that the culprit is tried and convicted, while the plea of insanity is put forward in bar of punishment. Whatever may finally be the authoritative determination on this important question, it is evident that the public mind is still unsettled in regard to it—it is a question which specially belongs to the medical profession, and yet it is one with which the profession, so long as a minute study of psychology makes no part of its education, is unable to cope.

The same may be said of the second question referred to above, namely, the responsibility of the insane in regard to crimes. Here the public are equally in want of enlightenment. It is a question of the utmost moment. We know, how great differences exist among those labouring under mental derangement as to the appreciation of right and wrong. We know that those who, affected with hopeless dementia, are incapable of perceiving this distinction, are generally, at the same time, incapable of committing deliberate crimes. But nothing is more certain than that in a large proportion of the insane there is a sufficiently clear perception of right and wrong. For unless this were true, where would be the foundation of the moral treatment now so happily substituted in our asylums for the coercive measures of former times? But as respects crimes committed by the insane, there are many questions still unconsidered, and undetermined. To whom is the public to look for a final adjustment of such a question? It is a question belonging to practical psychology.

The medical profession alone has sufficient practical experience of insanity to investigate such a question with effect. The public will put trust in the decisions of the medical profession as soon as the general voice pronounces that the medical profession, as a body, is really a tribunal competent to deal with psychological questions.

The third question referred to above is the expediency of the punishment of the insane for public crimes. The medical profession has less to do with this question than with the two previous questions. It belongs in particular to legislation and jurisprudence. Nevertheless, if public opinion ever come to respect the decision of the medical profession on psychological questions, there can be no doubt that the medical psychologist will have much to say on this subject. This question, as to the expediency of subjecting the insane to legal punishment, will probably ere long engage the public attention. It is hardly credible how many lives are every year lost by the hands of the insane! Men begin to perceive that they have too long suffered their opinions on the subject of punishment to be guided by the ravings of a few philanthropists destitute of all principle but a mawkish sentimentality. The present state of the law does not settle this question—for the law, in exempting the insane from trial on the ground of inability to plead, does not fix what amount of mental derangement is necessary for the attainment of this privilege of exemption. The question, therefore, is open. One thing is certain, that the great rule for the repression of crime in society is unfailing detection joined with unfailing punishment. This is, in the end, true mercy. Could this course be carried out, of how much additional happiness would it be the parent? Of how much misery would it stop the career? The true nature of punishment has often been pointed out—perhaps the day may come when public opinion will recognise its truth. In punishment there is nothing of vengeance for crimes—vengeance is left to the Almighty Judge of all the earth—society has no particular right to take a man's life—but it cannot exist unless it exercise its unquestionable power to protect itself by whatever means experience shall show best adapted to that end.

It seems plain, then, from the various and somewhat desultory considerations which I have set before you, that psychology should constitute an indispensable part of a medical education. The question will then arise, whether the future medical man should study the psychology of the schools of metaphysics, or the psychology of the schools of physiology. It is far from a determined point whether it would be advantageous to unite these two forms of psychology under one course of study—or whether it is not likely to be conducive to the future progress of the science at large, that each should be cultivated apart by its own appropriate means. It appears to me, however, to be a thing quite beyond question—that the medical man should be minutely acquainted with the views taught under both

forms of this science. It is in this way only that he can attain that standing and pre-eminence among the learned for which the other parts of his education, and the intimate acquaintance with human nature afforded by his professional pursuits, contribute so great facilities.

The psychology of the metaphysician is a system of the knowledge of the human mind founded exclusively on the evidence of every man's consciousness—it acknowledges nothing as true but what is derived from this source.

Physiological psychology is the knowledge of the functions of the nervous system in the animal kingdom, obtained through whatever channel may appear worthy of confidence. The latter, therefore, includes the former, and has a much wider scope. But it is necessary for the physiological psychologist to understand and respect the limits within which the psychology of the metaphysician is confined, that he may be able to debate with him numerous questions on the grounds chosen by the latter.

For example, while the physiological psychologist holds all debate as to personal identity and the existence of an external world unnecessary, he must be prepared to understand the difficulties on those heads entertained by metaphysicians, and to assist them in the solution of these difficulties.

It is manifest that all the preliminary difficulties of the metaphysician arise from his fear of assuming as self-evident things which he thinks can be established by reasoning back to ulterior principles. The physiological psychologist seldom encounters this kind of difficulty, because the more immediate instrument of his progress is observation, and because it is the discovery of facts alone with which he expects his labour to be rewarded; so that he takes everything for an ultimate fact, which is not manifestly founded on something with which he was previously familiar. The physiological psychologist would no more think of seeking proof in favour of personal identity, and of the existence of an external world, than he would propose to offer proof that the eye sees or that the ear hears. The two latter facts have long had on their behalf the universal belief of mankind, and as to the two former doubts respecting points, they were never heard of except among metaphysicians. Many such doubts manifestly owe their origin to the exclusive attention given by them to reflection on the phenomena of consciousness, to the nearly total exclusion of all consideration of the "concrete Ego," or bodily self.

If there be one thing more certain than another in human thought, it is the toothache under which I labour to-day suggesting the remembrance of that I suffered from a year ago, is a consciousness including the conviction that I am the same I who suffer to-day, and the same who suffered a year ago. The belief here

is inherent. It is a first principle—it excludes all reasoning—all argument. No doubts as to personal identity ought ever to have arisen among pure metaphysicians. These doubts probably first arose from some suspicion, even in the earliest ages, that the body was not the same matter at one time as it had been at a previous time, and thus the question being started, it was inadvertently taken up by metaphysicians, who did not even allow the body any place in their speculations.

As to the evidence of the existence of an external world, it is one of those questions which have very much exercised the acumen of metaphysicians, but very uselessly as to the results. If metaphysicians confine themselves to the study of the immaterial “Ego,” that is, to reflection on the pure phenomena of consciousness, it is manifest that no proofs of the existence of an external world could ever come within their reach. But they might have confessed this necessary defect in their system without any detriment to their pursuit of the philosophy of the human mind. For the mere supposition that all things are ideal, would not change by a hair’s breadth the several relations discoverable among the objects of human knowledge. There would still be the same broad distinction between sensations and emotions, between remembrances and the things remembered, between desires and the objects of desires, between passions and the objects of passions, as under an opposite system. If, on the other hand, metaphysicians admit the concrete “Ego,” or the bodily self in their system, and trace the development of ideas in the progress of childhood, they will undoubtedly discover evidence that, at an early period, the infant did not discriminate self altogether from external nature, but that, after a time, this distinction is fully attained—yet whether by reasoning, or by pure instinct, it may be impossible to determine. This, however, is the process undoubtedly which every infant goes through—and this is, after all, what philosophy has finally reached, namely, that the belief in an external world rests on the common sense of mankind, that is, on the conviction which arises in the breast of every child in the progress of its study of self and the things around, during the important period of self-education.

In short, there is plainly no more difficulty in the admission that such convictions as the belief in personal identity and the belief in the existence of an external world are the result of special endowments, than there is in the acknowledgment of the undeniable facts that it is in consequence of special endowments that the child recognises the differences of colours by the eye, the differences of sound by the ear, the differences of smell by the nose, the differences of taste by the palate, the differences of temperature and the differences in magnitude by the skin and muscular system. Man, in short, is born endowed with certain susceptibilities destined to be

called forth under corresponding conditions—when these conditions arise, the predetermined result follows.

It seems evident from these, and similar considerations, that what was termed above physiological psychology bears most on a practical psychology. It will be seen, from the general tenor of the observations which I have offered in this paper, that I regard a practical psychology as essentially the psychology of individual minds. It is a subject confessedly still in its infancy. It has not been possible, for that reason, to treat of it in a very connected or systematic form; but unless, I deceive myself, I have been able to point out some of its distinctive features, and to indicate to the medical observer some of the sources whence he may draw improvement in a department of knowledge so essential to the proper treatment of all those diseases in which an estrangement of the mental faculties is concerned.

The New Lunacy Bill.

The introduction of this important measure so soon after the interminable and wearisome Windham case, has led to the too hasty supposition that the Lord Chancellor has been induced to prepare his Bill mainly in consequence of what occurred in that case, which was indeed a fine exemplar of the evils of the system which are sought to be remedied.

But in truth these evils had long been well recognised, and although Lord St. Leonards' Act of 1853, is admitted on all hands to have been a most wise and skilful measure when it was enacted, it is now scarcely disputed that the time is over-ripe for new ameliorations of the law. That this is so will scarcely be denied by any one who has taken the trouble to read and consider the evidence given before the Commons' "Select Committee on Lunatics;" and the same fact is indicated by the two Lunacy Bills introduced by Sir Hugh Cairns, and by the late Lord Campbell. The readers of these pages will perhaps also remember a letter on this subject of Chancery lunatics, addressed by the editor to the chairman of the Select Committee, in which letter the great evil of the needless cost of lunacy inquisitions was dwelt upon, and such remedies were recommended to be applied as had suggested themselves to the writer in his limited knowledge of the subject.

We take some credit for having suggested in this letter one of the most important improvements in the manner of conducting lunacy trials, on which the Lord Chancellor has now placed the authoritative stamp of his opinion, namely the proposal that the alleged lunatic

shall be examined by the Court before any evidence is taken. 'Journal of Mental Science,' No. 35, p. 133.

The beneficial import of this change in the law, if indeed it is a change in the law, and not merely a legislative order to change a bad custom, cannot be over-estimated. The present rule to examine the alleged lunatic at the end of the proceedings, reminds one of nothing so much as of that celebrated discussion which took place in a learned society, on the question propounded,—why a fish, placed in a vessel full to the brim, did not make the water overflow, and did not add to the weight? and which, after learned reasons had been exhausted in explanation, a man of vulgarly common sense proposed to test by observation.

If in lunacy trials it is made compulsory on the Court to examine the alleged lunatic at the commencement of the proceedings, it will, we think, be found that this simple change will exclude much of that pseudo-scientific evidence to which the Lord Chancellor takes such reasonable objection. It is not in the nature of things that a judge and jury will be able to examine for themselves into the state of mind of an alleged lunatic, without forming a very strong opinion upon the subject; and this would especially be the case when that opinion formed was positive, namely, when the existence of the lunacy was obvious. In the case of Mrs. Cumming, for instance, "whose lunacy was obvious the moment she appeared before the jury," if this examination had taken place at the commencement of the proceedings, what psychological ingenuity could have explained away the existence of the delusions which she had avowed? In such cases, after the existence of mental unsoundness had manifested itself to the observation of the jury, not only medical but general evidence would become superfluous, and the subsequent proceedings would resolve themselves into mere matters of form, and be abbreviated to such dimensions as the presiding judge might deem right.

When on the other hand, in this examination the judge and jury were not able to observe the signs of unsound mind, they would scarcely venture to form a decided opinion that such unsoundness did not exist until they had heard the evidence tendered by the petitioners. But if this evidence was not sufficient to show the existence of that insanity which the Court had been unable to observe for itself, even then the trial would be cut short in the midst, a verdict negating the insanity would be returned, and all the time and cost of the defence would be spared.

The rule that the alleged lunatic shall be examined by the judge and jury before the commencement of the proceedings, would probably carry with it another result of great importance, namely, that of altogether preventing the fact of insanity being sent to be tried by a jury in some instances where a lunatic is a mere puppet in the hands

of attorneys or of others who influence him to oppose a petition and to demand a jury trial for their own selfish purposes. When a person who is unquestionably a lunatic has unfortunately come under the control of some unprincipled attorney, or of some other person deriving improper interest from the management of the lunatic's affairs, although the lunatic may be a mere puppet, he is liable under the present system to be induced to resist to the utmost, and at all cost, the most well-intentioned measures for placing him under the guardianship of the Court of Chancery. But if such persons, having the control of a lunatic, knew that the first step taken in a jury trial into the state of mind, would be a personal examination made by the Court, it does seem reasonable to expect that they would avoid the censure which would attach to them for conduct so obviously injurious to the lunatic, and to which they would, at all events, lose the inducement offered by prospective bills of costs.

Another provision in the Lord Chancellor's Bill, directed to lessen the time and cost of lunacy trials, is that by which he limits the evidence tendered in proof of the lunacy to a period of two years. We entirely concur in the wisdom of this measure. This limitation, indeed, is to be at the discretion of the judge, and the noble Chairman of the Board of Lunacy mentioned in the debate the instance of a particular form of lunacy, namely, that of latent suicidal or homicidal mania, in which, no doubt, this discretionary power would be used. It has occurred to us that there are two other circumstances under which this discretion placed in the hands of the judge may be usefully exercised. The first of these is, where it is claimed to tender evidence, not of the existence of insanity two years before the date of the inquisition, but of the cause of the insanity stated to exist at the time of the inquisition. To give an example, if a man has had a *coup de soleil*, from the effect of which he is afflicted with that dangerous form of insanity often resulting from this cause, in which the passions are more disturbed than the intellect—in such a case it might be very desirable to allow evidence to be given of the exciting cause of the lunacy, although it occurred at a period antecedent to the limit of two years. The other circumstance would be where the alleged lunatic has been for a long time kept away from observation, either by his own act or by that of interested persons.

Instances of this kind are not uncommon. We have had recent occasion to give evidence respecting the insanity of a man, whose friends were kept for years away from him by the woman with whom he lived. Suspicions existed that he was insane, but there was no proof. One day, however, he escaped, and was brought to us by the police in an advanced state of general paralysis.

In *Sharp v. Macaulay*, the lunatic had shut himself up for thirty years. (See this Journal, No. 19.) We think, however, that in

cases of this kind, it is better to provide legal facilities for giving persons named by the Court of Chancery due access to an alleged lunatic, who is under seclusion or control, rather than to extend the limits of time for evidence. And this, indeed, is done by the eighteenth clause, which empowers the Lord Chancellor to send the visitors to visit persons alleged to be insane, and to make inquiries and reports in reference to them. But is this clause sufficiently imperative on the persons to be visited? If so, this will be a very important and useful addition to the power of the Court, which can only now act by consent. The question, after all, is strictly that of the mental condition of the person at the time of the inquisition; and if he is proved to be of sound mind at that time, all the evidence in the world that he was of unsound mind even the week before cannot be worth a nutshell. Evidence going back from the date of the inquisition can only be of value either in so far as it describes a confirmed state of mind, which may fairly be presumed to continue up to the time of the trial, or else as it gives account of antecedent states of mind and body, which may be viewed as causes of the existing state.

And now we must come to that provision in the Lord Chancellor's Bill by which he limits medical evidence. At the first blush of this, we were inclined to feel professional vanity not a little wounded; but we are bound to ask, not whether the provision is flattering, but whether it is calculated to promote the public interests, by rendering judicial proceedings more certain and simple. The broad position taken by the Lord Chancellor is, that in inquisitions of lunacy the question mooted is the existence or non-existence of certain states of mind, as a matter of common observation; it is not whether these states are or are not conditions of disease, but whether it is a fact that they exist; and he maintains that the proof of this fact must depend on that kind of evidence which appeals to the understanding, and which gains the belief of common men, unlearned in the subtleties of physiology or metaphysics. In order successfully to controvert this view of the question, the least that it would be needful to prove is, 1st, that states of idiocy, lunacy, and unsoundness of mind, are always states of physical disease; and 2nd, that medical men are always able to recognize them as such in consequence of their professional knowledge and skill.

Now, we, in common with the great majority of medical men, do, upon grounds satisfactory to ourselves, verily believe that all these states of mind are owing to conditions of physical disease. But even here, in this very first step of the argument, we feel conscious of stretching the meaning of the word disease in order to include many cases of congenital and hereditary insanity; so that it would be more exact to say that we recognize these states of the mind to

be due to abnormal conditions of the physical organism, rather than to conditions of disease. Moreover, and this is fatal to our argument, many eminent men among us do not believe that insanity is invariably caused by any physical condition whatever. The somatic theory of insanity, even in this country, is not yet undisputed master of the field. There are eminent physicians who teach that insanity is a disease of the soul, as there are others, who hold the extreme opposite view, that crime is always owing to disease of the body; and there is at least one distinguished person who incoherently maintains both opinions to be true. We must, therefore, confess that we are scarcely in a position to expect the world to receive as established on undeniable proof this very first platform of our position. We are winning ground, it is true, year by year, but it is but a short day, in the history even of our own country since the diseases of the mind were by no means recognised as the peculiar province of the medical man; since such asylums as did exist were the worst of goals, and those who ruled over them were the commonest of gaolers. It is only within this very year that the laws promulgated by Government for the lunatic asylums in Ireland have been made to recognise the principal officers as medical men. This also is a very remarkable fact in regard to the pretensions of medical men to exclusive knowledge of diseases of the mind, that, with the exception of the University of Edinburgh, there is not one medical school in the three kingdoms which provides any teaching of, and without exception, not one which requires any study of, mental disease. If the belief is so widely accepted that insanity is always a physical disease, and that all laws affecting the insane ought to recognise the exclusive knowledge of medical men, is not this neglect of insanity by the medical schools utterly inexplicable?

The fact is, that the knowledge of insanity as a disease is yet in its infancy, and successive generations will have to devote themselves to the investigation of its phenomena, before it can be expected to grow into the strength of maturity. In the mean while, physicians have one or two truths to accept—the first of which is, that while their theories of the nature of insanity are most useful as instruments in scientific pursuits, they are of no value in judicial investigations; and the second is, that the empirical knowledge which many medical men have acquired by devoting themselves to the daily observation of the characteristics of insanity, and which is of unquestionable value in judicial investigations, cannot be said to be exclusively their own. Intelligent but utterly unlearned head-attendants, by living among the insane, become conversant with their moral and intellectual peculiarities, so that they would be able to tell a judge and jury whether these peculiarities did or did not exist in a particular case, not so well certainly as a physician with the same amount of em-

empirical knowledge, yet so as to express facts in a manner which can be understood by common men. A foremast-man may speak of common facts occurring at sea as accurately as a captain.

To be understood by common men—this, happily for Englishmen, is an essential requisite of all evidence in our courts of law, and it is one which medical witnesses must fully accept. Although they have surrounded their studies with technical words and speculative theories, until their use becomes a mental habit—in courts of law, unless they strip their opinions to the nakedness of common sense, and of the plainest language, they will fail to express the truth which they have to tell in a manner worthy of themselves and of the acceptance of their fellow-men. Now, the plain expression of an empirical knowledge of observed facts relating to the state of mind of an alleged lunatic is the very thing which the provision contained in the Lord Chancellor's Bill aims to substitute for those speculative views and theoretical opinions which have, in lunacy trials, been the cause of so much waste of public time and patience, and of so much discredit to our profession. The following is the intention of the Lord Chancellor, expressed in his own words:—"He had been told that his clause excluded medical testimony in these inquiries, but it did no such thing. He did not exclude the evidence of what a witness might have himself seen, heard, and observed. What he wished to exclude was, the evidence of speculation, fancy, and idle theory, not warranted by any inductive reasoning founded on facts." If the clause does succeed in fulfilling this intention, medical men who devote themselves to the study of insanity, and who honestly wish to express what they know on the subject and no more, will have good cause to thank the Lord Chancellor for removing them from a false position, and placing them in the one they ought to occupy as witnesses in lunacy trials.

The words of the clause by which this exclusion of speculation and idle theory is to be effected are—"Nor shall the opinion of any medical practitioner be admissible as evidence of the insanity of such person." Would not the sense, however, be made clearer by a change in the *ordo verborum*, thus: "Nor shall the opinion of any medical practitioner of [as to?] the insanity of such person be admissible as evidence"?

There can be no reasonable doubt of what the words mean as they now stand, but a casuist might argue that the words exclude from evidence *any* opinion of a medical man, which would be almost tantamount to his exclusion from the witness-box, for even common witnesses cannot be restrained to the logical limits of the matter of fact.

"By a *matter of fact*," says Sir G. C. Lewis, in his admirable work on 'Authority in Matters of Opinion,' "I understand anything of which we obtain a conviction from our internal consciousness, or

any individual event or phenomenon which is the object of sensation." "The essential idea of *opinion* seems to be that it is a matter about which doubt can reasonably exist, as to which two persons can without absurdity think differently." Strictly, then, a witness might not be able to say that a person was furious or talked incoherently without expressing opinions. To stick to fact, he would have to say that the man had knocked him down, and that he could not understand what he said. To save quibble, therefore, it would seem desirable to define the opinion which it is intended to reject, which would be sufficiently done by the slight verbal transposition suggested.

We must, in conclusion, venture to express the opinion that a court of law sometimes needs as much to be protected from the medical science of the barristers as from that of the physicians; for, according to what we have observed and experienced, the fine theories and hard words of the doctors are usually drawn out of them, more or less against their will, by the cross-examining barristers, who cannot afford to sacrifice the exhibition of the modicum of science which they have got up for the occasion. As an instance, a friend of ours had to give evidence at the last winter assizes against a young woman charged with the murder of her infant by a blow fracturing its skull. The counsel for the defence endeavoured to make him admit that the injury might have been caused by pressure against the *os uteri*, "the bone of the womb," as he learnedly translated it to the jury. "We have avoided technical terms thus far," said the doctor, "but do allow me to remind you that *os* means a mouth as well as a bone."

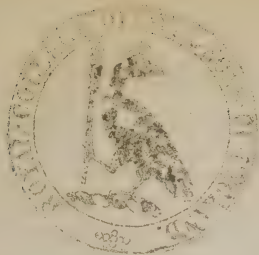
Whenever we have been drawn into seeming pedantry it has been in cross-examination; and it was in cross-examination that Dr. Winslow hit upon the ethico-pathological definition of Windham's insanity as a "paralysis of the moral sense." Really we ought, in self-defence, to insist upon the publication of the questions to which the replies are given for which we sometimes get laughed at. Let us, however, never forget Bacon's golden maxim—"Loquendum ut vulgus, sentiendum ut sapientes."

APPOINTMENT.

Mr. S. W. D. WILLIAMS, M.R.C.S., &c., son of Dr. Williams, of the Gloucester Asylum, has been appointed Assistant Medical Officer to the Northampton General Lunatic Asylum.

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Cases illustrating the use of the Roman Bath in the Treatment of Mental Disease. By C. LOCKHART ROBERTSON, M.B. Cantab., Honorary Secretary to the Association of Medical Officers of Asylums and Hospitals for the Insane. (*With a ground plan of the Roman Bath at the Sussex Lunatic Asylum, Hayward's Heath.*)

IN the *Journal of Mental Science* for July, 1861, there is a review (which I wrote) of Mr. Erasmus Wilson's work on the Eastern, Turkish, or, more properly, Roman bath.* Besides

* *Distinction between the Roman and Turkish Bath.*—Mr. Wilson generally uses the term Turkish bath in speaking of the hot-air bath. As used, however, in England, the hot-air bath resembles more the Roman than the Turkish, and for all sanitary and remedial purposes, the more we approach the Roman usage of the bath, the better shall we fulfil its indications.

A very few words will show how materially the two processes differ. The Roman bath was a tonic and bracing agent, fitted for the use of the great people who invented it; the Turkish bath is an enervating process, just suited for the effeminate Turk. The bracing of the body by cold water was the end of the Roman process; the luxurious cooling of the body by the slow action of the air, the bather the while indulging in the use of narcotic stimulants, is the summary of the Turkish bath. It is important that the distinction between these two forms of the hot-air bath, the Roman and the Turkish, should be insisted on. Much of the popular prejudice against the use of the bath, and the contrasts drawn between its health-giving use and that of a good day's hunting or shooting, result from the popular and just notions of the effeminacy of the modern Eastern bath, with its abominable process of shampooing and its luxurious ease and enervating cooling process. Only let the English public know that the revival of the bath in England is accompanied with the tonic and bracing practices of the early Roman bath, and these prejudices will soon yield, and the bath become a national institution in our towns, a necessary in our country houses, and a therapeutic agent in every hospital and asylum in the land.

entering into the general history of the revival of the bath in England, and of the method of its administration (as now used in London), a ground plan and description is given there of a Roman bath erected by the Visitors of the Sussex Lunatic Asylum, on my representations of its possible efficacy in the curative treatment of mental disease. For facility of reference I reprint at the end of this paper this description of the Hayward's Heath Bath, with the illustration.

I must refer to that review for a statement of the history of the Roman bath; of its use in the ancient world, and of its modern adaptation in Turkey. I would also refer to a long extract from Mr. Wilson's pamphlet, giving an excellent description of "*the operation of the bath.*"

I wish now to record the results which have followed the use of this powerful remedial agent during the six months (June, 1861—February, 1862), exclusive of repairs, which it has been in use. As any accident would have been fatal to its future prospects, I have used much more than ordinary caution in the selection of cases for treatment by the Roman bath.

I have had no serious accident, nor anything more alarming than a slight faintness, relieved at once by removal to the *Frigidarium* (ground plan, c, p. 173).

The method of its use.—I have made experiments on the use of the bath at different temperatures, from 120° to 180°, both on my own person and with the patients. In a thoroughly well-ventilated bath (such as the Hayward's Heath bath is), and with a due supply of moisture, I believe a temperature of 145° will be found the most efficient. A higher temperature causes an unnecessary excitement of the circulation, and at lower temperatures the action of the skin is so slow that the patients get wearied of sitting, and restless. At 145° to 150° about twenty minutes ensures a full and free action of the skin. The patient is then bathed in perspiration; every pore of the skin acting. In cases submitted for the first time to the influence of the bath, I practise effusion of tepid or warm water before going into the *Calidarium*.

The state of the wet bulb thermometer deserves attention. It ought not to stand higher than 110°. Watering the hot tiles will at any time reduce this thermometer ten degrees.

I generally administer the Roman bath twice a week, and in delicate cases once a week. About twenty minutes is the average time spent in the *Calidarium*.

The patient is then passed on to the attendant in charge of the *Lavatorium*, where he is soaped all over, and then, according to the case, has either the two-inch cold douche over him (avoiding the head), preceded by a pail of tepid water, or else one of the milder cold-water applications. The two-inch douche is, however, by no means so alarming as it sounds. I have known the most delicate

ladies use it, and with success, in uterine disorders with a relaxed state of mucous membrane, &c., and I have myself repeatedly used this douche with pleasure, as have also many of my friends.

I have tried various experiments as to the relative cost of heating the bath, and I find it cheaper to keep it constantly heated (banking the fire up at night) than only to heat it for use on certain days of the week. Our consumption of coke is one bushel per day.

General results of treatment by the Roman bath.—The most striking physiological action of the Roman bath, when continued over a series of weeks, is a steady improvement of the function of nutrition, shown by marked and often rapid increase of weight. In my own case, after keeping for ten years previous at the same weight, I have gained one and a half stone weight during the twelve months that I have pretty regularly used it, and I have observed the same result in other cases of persons in health using it for a continuous period. The headache, which is often complained of in the early baths, passes off when the action of the skin is thoroughly re-established.

The improvement in the clearness of the complexion and the removal of all slight eruptions and such like blemishes of beauty, renders the Roman bath the best cosmetic I know of. I have successfully impressed this fact on one or two of our female attendants. I am sure if young ladies who frequent balls in the very low dresses now in fashion, knew how the tint and texture of their shoulders, &c., would be thus softened to the eye, they would regularly, in the ball season, resort to the weekly use of the Roman bath.

Another of the most frequent physiological results of the continued use of the Roman bath is the restoration of the uterine functions to healthy regularity. The value of such an indication and result of treatment in cases of mental disease can hardly be overrated.

My best success has been with cases of melancholia with great depression and refusal of food. Cases of maniacal excitement, on the other hand, have not usually benefited by the treatment.

In looking over the cases which have been, more or less, under treatment in the Roman bath during the six months it has been in use here, I find a considerable variety in the results. The cases in which its action has been most beneficial are in those of melancholia with refusal of food—a common and wearisome form of mental disease, and the favorite subject hitherto of the opium treatment.*

* I have one of these old opium cases, which I removed from a London licensed house, and in which I was obliged to give twenty grains of solid opium a day, so confirmed had the poisonous habit become. When the drug was withdrawn or lessened, acute maniacal symptoms, with strong suicidal tendency, supervened. For the last three months I have discontinued the opium and given the bath twice a week with rather an improvement in health and mind.

In most of the chronic cases which have been regularly submitted for a consecutive time to the action of the Roman bath, there has been a marked increase of weight and flesh, the result of improved nutrition. Some very broken-down old cases have thus been partially benefited.

I. In the male department, besides one or two experimental trials I have had fifteen cases under regular treatment in the Roman bath, of which cases I proceed to give a short summary.

Four of these cases I have given pretty fully, in order to show the course of the symptoms under treatment.

CASE 1.—Melancholia, with delusions and a suicidal attempt; great emaciation and loss of strength; treatment by opiates and pail douches; subsequent use of the Roman bath, with steady improvement of nutrition; subsidence of the delusions and partial restoration of mental power and health.

C. P—, No. 501, male, æt. 44, single, admitted 13th of May, 1861.

History.—A man of temperate habits. The exciting cause of his disease, was six months' imprisonment for felony, from which he was released two months before his admission in a depressed state of mind. Shortly before admission he attempted to commit suicide by throwing himself down a well 180 feet deep, at the sinking of which he was employed.

State on admission.—On admission he was in a most reduced state of health, with an anxious expression of countenance, refusal of food (which continued a fortnight), and a variety of delusions as to his being haunted by the devil, the hopeless nature of his malady and of his prospects of recovery. There was a considerable injury to the right leg, occasioned by his fall down the well. Very restless nights. He took a mixture of quinine, iron, and acid. On the 15th May a tepid and cold pail of water were ordered daily at bedtime, with a partial improvement in his rest and sleep. He continued very depressed in mind and feeble in body, unable to occupy himself or to divest his mind of the hopelessness of his case and of his lost condition. Appetite poor. He had a pint of porter, two ounces of whisky, beef tea, two eggs, daily, and as much of the ordinary diet as he would eat.

On the 4th of June the Roman bath was opened for use, and he was sent to it. He took it three times a week for the first fortnight, but as it seemed to increase the depression, it was reduced to twice a week. This treatment has been continued up to the present date (February, 1862), but as the bath was two months under

repair with alterations, &c., the treatment of two baths weekly may be said to have been followed for six months. The improvement has been slow but steady. He has decidedly gained flesh and weight. Instead of mere skin and bone, he is now a stout, well-fed man. He occupies himself in household work in the wards. His delusions have entirely left him, and he is apparently of sound though weak mind. I do not consider him cured; indeed, I doubt his being fit for work in the world, and probably a return to his former occupation and low associates in the livery stables of Brighton would result in a return of the symptoms. Still here is a case in which there was refusal of food, extreme melancholia, and utter loss of health, restored to a state of cheerfulness, usefulness, and good bodily health; a comfort and help to the other patients in the ward, instead of being a burthen and anxiety to those in charge of him. If this had been my only success with the Roman bath, I should consider that the trouble and cost had been profitably expended.

CASE 2.—*Melancholia; obstinate refusal of food; debility; opiate treatment; slight benefit; use of the Roman bath; marked and steady improvement.*

T. R—, No. 445, male, æt. 40, married, admitted October 17th, 1860.

History.—Insanity, hereditary on his mother's side. First symptoms, five weeks before admission; exciting cause, the immoral conduct of his wife. A man of good character and sober habits. Made a slight attempt to cut his throat. Had refused all food for five days past.

State on admission.—Much emaciated and reduced. Does not appear to comprehend what is said to him. Obstinate refusal of food. Circulation low, extremities cold, restless and sleepless. Occasionally passed his evacuations unconsciously.

During the months of October and November he continued in a miserable state, hardly able to stand, refusing his food, and requiring always to be fed. He had some opiates at night, but without any benefit. He also took 3ss lemon juice three times a day, and had a tepid and cold pail of water at bedtime. This treatment was continued during the winter, with slow improvement, retarded by occasional return of the refusal of food.

On the 4th of June he began the Roman bath, first twice a week, then once a week, and now he takes it on alternate weeks. The improvement has been very marked. He is now a strong, able-bodied man, working daily on the farm. There is still a morbid slowness of thought and depression of mind.

CASE 3.—*Melancholia ; at the verge of death ; refusal of food ; use of the Roman bath ; recovery of bodily health ; mind in a state of dementia.*

T. L—, No. 513, æt. 39, male, married, admitted June 27th, 1861.

History.—A farm-labourer. First attack. Mind is said gradually to have been giving way for the last six months, in consequence of discomfort in his situation and anxiety to satisfy a hard, exacting master. Has attempted to injure himself and others, and for the last few weeks previous to admission refused all food. Not hereditary.

State on admission.—Very much reduced in strength ; pulse feeble, 116. Apparently at the verge of death from the effect of the journey ; unable to answer any question or to understand what is said to him. Obstinate refusal of food. He was placed on beef-tea, stimulants, and an occasional warm bath. His progress was very slow, still he gained ground. In September he was strong enough to be carried to the Roman bath, and he has since had them twice a week. His mind remains in a very depressed state, but his bodily health has greatly improved, he eats and sleeps well, and he has for the last week joined the working party, on which he is reported to be efficient.

CASE 4.—*Melancholia ; very reduced state ; refusal of food ; use of the Roman bath ; considerable improvement.*

T. T—, No. 578, male, æt. 39, widower, admitted December 31st, 1861.

History.—The third attack of mental disease, having previously been under treatment at Colney Hatch and Barming Heath. A ship-builder by trade. Worked in Chatham Dockyard after his discharge from Colney Hatch. He relapsed, however, and was sent to Barming Heath, but after his discharge thence he did nothing, and was not considered by the parish authorities as quite recovered. The original exciting cause of his disease was grief at his wife's death. Insanity hereditary on his mother's side. An excellent workman, and always bore a high character.

State on admission.—In a very reduced state of health ; refusal of food ; nervous and suspicious ; will not answer questions ; no sleep for several nights. Opium (Taylor's Liquor Opii) seems to increase the nervous symptoms. Tearing his clothing and getting up all night. The refusal of food continued for several weeks ; great emaciation and loss of strength.

January 5th, 1862.—The opium discontinued, and the patient carried down twice a week to the Roman bath, he not being strong

enough to walk. The restlessness so great that an attendant took the bath at the same time each of the first five times. The skin acted freely from the first. The improvement was more rapid than in case C. P—. After the first five baths he walked down himself, and then began to show an interest in the proceeding, assisting to dress other patients, &c., &c., while at the first he could neither dress nor undress himself. He has steadily gained flesh and strength. He works cheerfully in the wards; appetite good; sleep good. Conversation rational, but there is still considerable mental depression. I still look for considerable improvement in this case.

The following male cases which have also been under treatment in the Roman bath may be more briefly alluded to, in illustration alike of its failure, of its use in conjunction with other remedies, and also of its use in chronic mania in improving the habits and consequent comfort of the patient, though, of course, employed without any hope of cure.

In a case of recent acute mania, P. P—, No. 498, who was cured of the maniacal symptoms with the packing in the wet sheet, but who had a relapse from the premature visit of his wife, which threatened to end in dementia, the use of the Roman bath did harm, owing to the great depression invariably resulting from it. I put P. P— subsequently through all sorts of treatment, and without any visible improvement. I at last committed him to the curative influences of expectant medicine, fed him well, and kept him warm, and by degrees his mental powers returned, and he recovered, and is now (February 15th) working in the carpenter's shop, and will shortly be discharged cured.

In the case of S. T—, No. 549, who was admitted in a state of recent dementia, following an attack of acute mania which had been ignorantly dealt with by the union authorities, I was very sanguine that a careful use of the Roman bath would result in his recovery. He is a young man of good constitution and rather a languid circulation. He had ten baths, given twice in the week, with, however, the result of materially increasing the unfavorable symptoms of his case, inducing also refusal of food, extreme restlessness, and tearing of his clothes. He was one of the few patients who appeared alarmed at the process. I next tried the cold douche in this case, but was equally unsuccessful. Left without treatment, he is quiet, but apparently hopelessly demented.

In the case of W. H. C—, No. 287, with fixed delusions and a good deal of consequent irritation and violence, the symptoms were undoubtedly aggravated by the use of the Roman bath. The cold douche at bedtime had rather a soothing effect, but the case is

passing into one of general mania, with occasional violence. There is also albumen in the urine and some dropsy.

J. B—, No. 109, is a case of chronic mania of many years' standing, which was attended with a great deal of noisy talk and excitement. The use of the Roman bath for a month removed all excitement and noise, and he now works daily on the farm. That his mind is unimproved I need hardly add.

J. L—, No. 560, is a case of senile mania, recently admitted in a state of great excitement. Previous to admission there had been violence to others. He had the Roman bath for a month, and enjoyed it very much. The excitement abated after the first bath or two, and he continues calm and collected unless when he is led to talk about his family grievances.

S. N—, No. 562, is a distressing case of melancholia, with delusions bearing on his health, and occasional fits of great excitement. The Roman bath was used for many weeks, but, except for about a couple of hours immediately following its use, no effect was produced. Packing thrice daily in the wet sheet, followed by the pail douche, has, on the other hand, materially relieved the urgent symptoms.

In a case (J. K—) in which the peculiar smell from the skin of lunatics was extremely unpleasant, reminding one of the odours of the old private licensed houses, and in which the steady use twice a week of the warm bath and soap, and a daily cold douche bath, had failed in remedying the nuisance, I found that a few weeks' treatment under the Roman bath entirely succeeded. The case was one of dementia, occurring in a young man as the sequel of sunstroke, in the West Indies. His habits on admission, about two years ago, were very dirty, but this a month's careful night-nursing had long ago cured. But that terrible smell—as adherent and peculiar as that of the fox—remained until very recently, when I thought of trying the powers of the Roman bath on it.

Last summer the Visitors admitted forty sailors from the Naval Lunatic Hospital at Haslar, principally refractory Irishmen, ignorant of order or discipline, violent, and many of them dirty in their habits. I have had four of them under treatment in the Roman bath.

CASE. 1.—J. S— arrived from Haslar in a very excited state. He tore his clothing, spent hours in loud shouting, ate grass and any filth he could put his hands on, and was dirty in his habits. After three or four weeks' treatment with the Roman bath he gradually became calmer, clean and orderly in his habits, and, although

there was great weakness of mind, his conversation became rational, and he rapidly gained flesh. His nights were quiet, and he was placed in an associated dormitory. He is a young man about thirty years of age. Suddenly one morning he had an apoplectic seizure. I treated him with stimulants, and in a few days he was about again, but his mental power was gone, and partial paralysis of the left side remained. Since then he has, after each time slowly improving, had two similar seizures. This is the only case in which I have seen any untoward symptoms even distantly connected with the use of the Roman bath. Whether the bath was the exciting cause of the apoplectic seizure, or whether it resulted from the previous cerebral disturbance, it is difficult to say. I have felt it due to truth to record the facts as they occurred.

CASE 2.—W. B—, described as a dangerous, violent lunatic, arrived from Haslar handcuffed, and, on being released, at once knocked an attendant down, and from time to time renewed such and similar feats. He took twelve Roman baths (two a week as usual), and he has for some months now been perfectly calm and orderly in his conduct, all irritation having thus been removed.

CASE 3.—R. R—, an old man, subject to recurrent mania, very noisy and troublesome, but not violent, under his attacks. Tolerably sane in the intervals. Had been frequently transferred to and fro from Greenwich Hospital to Haslar. The day after his arrival one of these attacks came on and ran its usual course of noise, filth, and destruction; a most troublesome case. He was treated with the wet sheet and cold pails. A second attack was cut short in a very marked way by the use of the Roman bath. In the intervals of his attacks he is employed with the working party on the farm. The last attack lasted only three weeks instead of six weeks as before, and was much modified in its unpleasant symptoms.

CASE 4.—W. F—, a case of melancholia with suicidal tendency (he cut his throat when with the fleet), arrived from Haslar in an extremely depressed state, with refusal of food, emaciation, and such symptoms. He has taken the Roman bath twice a week for about four months, and he appears to me now to be convalescent. He has joined the working party, and has gained weight and strength. Such cases of melancholia appear undoubtedly to benefit from the continued use of the Roman bath.

II. I now pass to the record of the cases which in the female department have been under treatment by the Roman bath.

CASE 1.—*Melancholia; attempt at suicide; no delusions; great emaciation and debility; treatment by steel and aloes and porter; subsequent use of the Roman bath, followed by restoration of the menses and steady improvement in mental and bodily health.*

S. D—, No. 524, female, single, æt. 39, admitted 3rd August, 1861.

History.—Twice attempted suicide before admission. Hereditary predisposition to insanity; first attack of three months' duration.

State on admission.—A quiet-looking woman, extremely depressed in spirits; no delusions; bodily health reduced; great emaciation; pulse feeble, tongue foul, &c.; sleeps pretty well.

She had at first some aloes and steel and porter, but she made little or no way under this treatment.

The end of October she began the use of the Roman bath, and she has since continued, with occasional intermissions, to take it once a week. The menstrual functions were in January restored, and she has since kept regular. She has gained in flesh and strength, and is more cheerful, but still liable to fits of depression. She states herself that the baths have done her much good. I hope she may recover sufficiently to be intrusted to the care of her friends. The hereditary taint and form of the disease are unfavorable to a permanent restoration to mental health.

CASE 2.—*Acute melancholia; obstinate refusal of food; improvement under the use of aloes and steel and porter; relapse from fright; symptoms obstinate and persistent; use of the Roman bath; steady improvement (no cure).*

H. M—, No. 395, female, æt. 57, married, admitted July 24th, 1860.

History.—Attempted suicide before admission. Cause of disease unknown. An industrious woman; a laundress.

State on admission.—Extremely gloomy and depressed, refusing to reply to questions; circulation languid; gastric derangement; refusal of food, requiring to be fed. Under the use of aloes and steel and porter, a marked improvement took place after a few weeks, and she went to work in the laundry. A fire taking place in one of the drying closets alarmed her much, and a relapse occurred (September 26th, 1860). From this date until June, 1861, she continued in a most trying state, requiring constantly to be fed; taking quantities of stimulants and yet getting no better. She lost strength and flesh, and œdema of the lower extremities set in (no albumen). I gave her up, and thought she could not live many weeks. I thus felt her

to be a fit subject of an experimental trial in the Roman bath (June 4th, 1861).

The effect was, as usual, only gradual. She has taken the bath nearly regularly ever since then, with a steady improvement in health and condition. She is again a strong, able-bodied woman, and regularly takes her food (ordinary diet with porter). She also works a little at cleaning in the galleries. I have not yet ventured to send her back to the laundry, fearing the influence of her associations as to the fire there.

CASE 3.—Acute mania, result of mental emotion shortly after delivery; partial recovery under the use of morphia and the wet-sheet treatment; continued suppression of the catamenia; use of the Roman bath; perfect recovery of mental and bodily health.

J. R—, No. 528, female, single, æt. 19, admitted 12th August, 1861.

History.—Was confined of an illegitimate child nine weeks previous to her admission, and the week after returned to service, when believing (though falsely) that a remark of her mistress pointed to the discovery of her lapse, she had a sudden attack of acute mania, for which she was at once sent to Hayward's Heath.

State on admission.—A young woman of strong frame and good constitution. Very incoherent, incessantly talking and shouting; pulse 100, weak; face flushed, head hot, skin dry and hot; general health shaken by her confinement and mental shock. For a week she was treated with large doses of morphia and stimulants. She was menstruating at the time, and the wet sheet was, therefore, inapplicable. The excitement continued, as also the sleeplessness, with but little intermission. The wet-sheet treatment was then cautiously applied and continued for a month, the morphia being at the same time given (as much as six grains in the twenty-four hours). At the end of the month she again menstruated, but her mind was still far from sane, although some improvement was to be traced.

The morphia was then omitted and the water treatment persevered with for about seven weeks longer, when her mind recovered so far that she was viewed as convalescent. There had, however, been no menstruation since the second time after her admission, and her health was shaken by the prolonged mental disease and treatment. She began the Roman bath in August, and continued it for three months twice a week. After four baths the menstrual functions were restored and continued regular. She gained immensely and rapidly flesh and strength, went to work in the laundry, and was, on the 27th December, discharged cured, and in better bodily health and stouter than she had ever been.

CASE 4.—*Puerperal mania ; second attack ; great depression of mind and spirits ; opiate treatment at first ; subsequent use of the Roman bath ; recovery ; partial relapse from premature discharge.*

E. D—, No. 505, female, æt. 32, married, admitted 28th May, 1861.

History.—Wife of a carpenter ; had a previous slight attack after her first confinement, four years ago, which was treated at home. The present attack came on gradually after her confinement, eleven weeks previous to her admission, with symptoms of moral perversion in dislike to her child and husband, followed by fits of extreme depression and crying, alternating with violence and excitement.

State on admission.—A delicate, nervous person ; complains of great sleeplessness ; face flushed ; frequent fits of crying ; very unsettled.

Had an opiate for a few nights, on which she slept ; some days a little better, and again next day depressed as before ; no delusions. Porter and extra chop ordered.

On the 21st June she began the Roman bath, twice a week, and continued it for a month without much improvement.

She then, however, began to gain flesh and to mend. The fits of depression became less frequent, and she was generally more cheerful and contented. She kept well, and, on the 31st of August, she was discharged cured.

Her discharge took place earlier than I should have wished. I weakly yielded to the pressure of her husband and herself, and the result was a relapse a few days after her return home. The symptoms were not, however, so serious as to require her removal to the asylum.

CASE 5.—*Mania (recent) from exciting preaching ; weakness and loss of health ; suspended menses ; use of the Roman bath ; remarkable and rapid restoration of health ; no mental improvement.*

J. C—, No. 511, female, single, æt. 20, admitted June 19th, 1861.

History.—Much difficulty in learning anything of her history, except that at some vague period between three months and three years her mind was said to have been upset by some lay preacher of the gospel in Brighton. She herself can give no account of it.

State on admission.—In a state of mania ; restless, excited, incoherent in conversation, rambling on religious subjects, much reduced in health, emaciated, pulse feeble, tongue pale, &c. She was treated with aloes and steel and porter. She became a little

calmer, but no mental improvement took place. Any attempt to employ her increased the excitement. No appearance of menstruation; very weak in health. The end of August she began the Roman bath, and by the 17th September menstruation was restored. She continued the bath for three months, and has menstruated regularly ever since September. She gained enormously in flesh and strength. The bath was continued till December. She is now (February 15th) in robust health, uterine functions regular. This case is, however, an instance of great and wonderful improvement of health under the use of the Roman bath, unattended by any mental progress. She is still very excitable, and her mind so perturbed that she cannot give any connected history of herself. A girl of good education and appearance. She employs herself at her needle. She has now no treatment, there being no further indications of treatment to fulfil. I very much doubt of her recovery.

Besides the five cases here detailed I have accurate notes of other eight cases which have been subjected to this treatment.

C. S—, No. 522, was a case of acute mania, which, during a year's treatment at Bethlehem, had passed into apparently confirmed dementia. On admission she was inattentive to the calls of nature, both by day and by night. Menstruation suspended. A strong, healthy young girl. Cannot answer the simplest question correctly. She has been under treatment with the bath for more than three months. Her habits are improved, but no change whatever has taken place in her physical or mental condition. She has not menstruated. She is still under treatment, although I hardly hope for any result.

M. P—, No. 526, a girl off the Brighton streets, with acute mania and uterine excitement. The most patient use of the cold-water treatment, both the cold wet sheet and the continued hip bath, have failed to effect the slightest improvement. The same may be said of a course of opiate treatment, of digitalis, of warm bath. She had a dozen of the Roman baths without any benefit. Indeed, if anything, they rather seemed to increase the excitement.

M. B—, No. 494, a very troublesome, dirty case of acute mania in an old woman, which was treated chiefly with opiates and got calmer, has had her general health materially improved by the use, for two months, of the Roman bath. She is now under treatment with cold pails at bedtime, with the view of procuring rest and improving her habits.

S. C—, No. 462, is another very troublesome case of mania

coming on during pregnancy and continuing after delivery, with destructive and dirty habits. Here the Roman bath did no good at all. Two cold pails at bedtime procured more rest than any opiate in this case, and she has by the aid of time improved in her habits.

M. J—, No. 187, the most intractable case of mania, with emotional excitement, in a woman about 55, which I ever met with.* The bath was persevered with for three months without the slightest benefit. She subsequently died suddenly, and a post mortem revealed unsuspected fatty degeneration of the heart. It was well she did not die in the bath.

M. L—, No. 383, an interesting young girl, with emotional excitement and obstinate suppression of the catamenia, contrary to my hopes, derived no benefit from the bath. She was subsequently removed to Hoxton House.

M. C—, No. 238, a case of mania, which lapsed into dementia, with dirty and destructive habits, was another case which derived no benefit from this treatment.

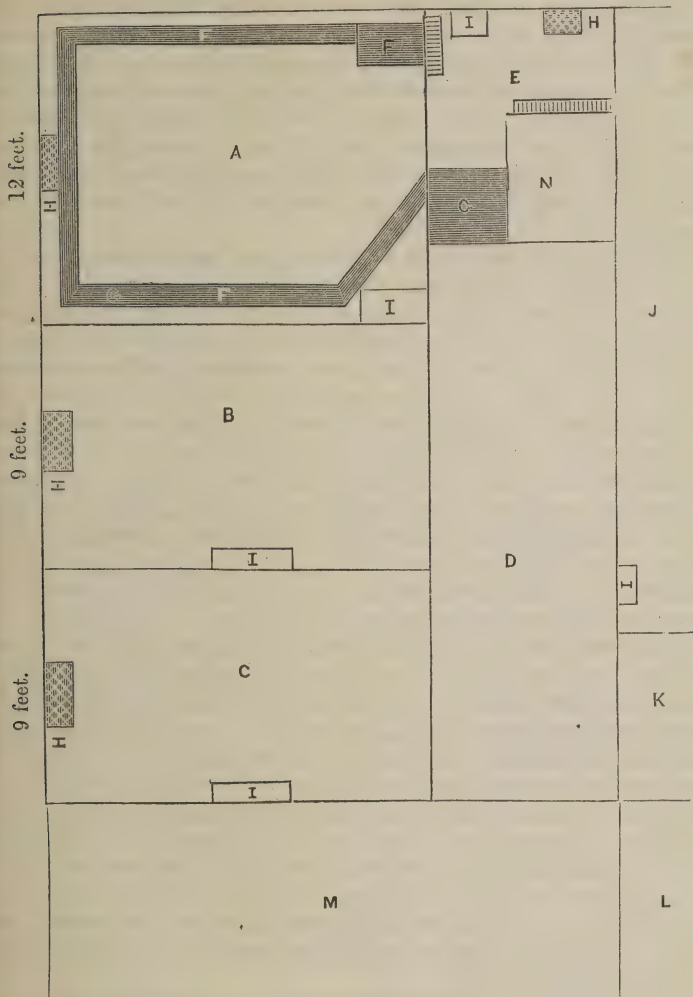
Lastly, M. P—, No. 490, may be referred to as a case of monomania which recovered, and in which the fading of the delusion was simultaneous with great improvement in strength and increase of weight under the use of the Roman bath.

* I took the opportunity of a visit he paid me, of consulting my friend, Dr. Sherlock, on this case. He advised porter and extra meat diet, which she got, but without any mitigation of the symptoms.

Hayward's Heath, Sussex.
March, 1862.

GROUND PLAN OF THE ROMAN BATH ERECTED AT THE
SUSSEX LUNATIC ASYLUM, HAYWARD'S HEATH. *June, 1861.*

10 feet.



- A. Hot-air room. (*Calidarium.*)
- B. Washing-room, with hot and cold douche pipes. (*Lavatorium.*)
- C. Dressing-room. (*Frigidarium.*)
- D. New drying-closet.
- E. Stoke room for furnaces of bath and drying-closet, with furnace mouth.
- F. Furnace and flue enclosed in hollow channel.

- G. Chimney.
- H. Windows.
- I. Doors.
- J. Washhouse.
- K. Old drying-closet.
- L. Laundry.
- M. Washhouse yard.
- N. Hot-air apparatus of drying closet.

DESCRIPTIVE NOTICE.

The principles of the construction of the bath are, after all, not very difficult to master. We have recently constructed one at Hayward's Heath of the most simple and inexpensive kind. It was built as a lean-to to a new wash-house, so that the chimney-flue and stoke-hole were constructed to hand, and only two walls out of the four had to be built. The total cost, including laying on the water, douche-pipes, &c., was under £50. It is, I believe, the cheapest bath which has yet been built. The annexed ground plan will, with a few words of explanation, show the kind of arrangements necessary.

The entire building is thirty feet long by ten feet wide, and is divided into three compartments of nearly equal size (letters A, B, C), each being lighted with a window. In the hot-air chamber the window of thick ground glass is a fixture, and the fresh air is admitted by one of Sherringham's ventilators fixed in the upper part of the north wall. I am not acquainted with any ventilator so well suited for the admission into a room of the external air as that of Sherringham. The flue extends round the four sides of the room, passing under the door and up the wall across into the chimney of the new drying-closet. The flue is four feet high, and is built in a hollow air-channel, so as to give out as much heat as possible. The centre of the chamber is paved with tiles. The flue forms a good seat, with a board placed on it. By placing a curtain across the upper part of the chamber, and over the furnace (F), a *laconicum*, or inner hot chamber, is at once procured. The outside walls are hollow and lined with sawdust. The roof is ceiled under the rafters, with a sheet of sawdust between. The height of the chamber—a lean-to—is at the highest twelve feet, and at the lowest nine feet. The extraction of the foul air is best, I believe, attained by opening a soot door in the ascending flue; this, with Sherringham's ventilator open, makes a ready, simple, and easily regulated change of air in the chamber. A copper tank in one corner both keeps a constant supply of water, warm enough for the douche, and also by evaporation aids in diffusing moisture in the chamber, which must further from time to time be increased by the use of a watering-pot on the heated floor tiles. This hot-air chamber can in four hours be heated, if desired, to a temperature of 200°

The next room is the washing-room (B), or *lavatorium*, which is sunk a step lower than the level of the *calidarium* or *frigidarium*, and supplied with a drain to let the waste water off. In the washing-room we have introduced several pipes of a shower-rose, with hot and cold-water, and two douche-pipes, one of two inches and the other of one inch diameter. A couple of pails of water, when an attendant is at hand, is more convenient, and to many insane patients less alarming,

than the douche-pipe. The dressing-room (c), *frigidarium*, opens on to the washhouse yard, and is both the entrance-room and dressing-room. It is rather smaller than is desirable, but still large enough to cool oneself in by the aid of the open window.

I have estimated the cost of this bath at £50. I have since had to spend £10 in building the flue round the *calidarium* (F, F), with fire-brick and fire-clay. The original flue, built in ordinary brick and mortar, fell in. Then, in any future calculations, it must be remembered that I had free of cost the main chimney flue, which was built for the drying closet; that the drainage was there; the water just at hand; and that, being a lean-to, I had only two walls to build. But in most public establishments some such handy corner can be found. I would at any rate be willing to contract (were I a builder) for a Roman bath of the size and dimensions of the one at Hayward's Heath, complete in every detail, for £150. How easily the interest of this sum may yearly be wasted in drugs of very fanciful reputation and high price.

POSTSCRIPT, *May* 20, 1862.

I have been favoured by the Inspectors of Asylums in Ireland with a copy of their Eleventh Annual Report (March, 1862). In their notice of the Cork Asylum, they thus comment upon the introduction there of the Roman bath:—

“It (the Roman bath) has now been in operation for over twelve months, and so successfully that similar baths may well be adopted in other asylums. The resident physician reports very favorably of its tranquillising effects, whilst for general use it has, in a great measure, superseded the common tepid bath, it being daily employed on an average, by about thirty patients, who take it in succession through the house, unless in particular cases there be reasons to the contrary. On inquiring from the lunatics themselves, we find that it is agreeable to the great majority, and some even regard it as a luxury.”

The Problem of Mind, propounded to Metaphysics and Science.

- I. *La Vie dans l'Homme*, par M. TISSOT, 1861.—II. *Tableaux de la Vie Animale*, par M. VOGT.—III. *Le Cercle de la Vie*, par M. MOLESCHOTT.—IV. *Force et Matière*, par M. L. BÜCHNER.—V. *Le Monde en tant que volonté et représentation*, par M. SCHOPENHAUER.—VI. *Anthropologie*, par M. HERMAN FICHTE.—VII. *Nature et Idée*, par M. CARUS.
- I. *Life in Man*.—II. *Pictures of Animal Life*.—III. *The Circle of Life*.—IV. *Force and Matter*.—V. *The World as far as Will and Performance*.—VI. *Anthropology*.—VII. *Nature and Idea*.

OF late years, science has analysed more closely, than beforetime was practicable, the relations connecting the organic with the inorganic world. It has demonstrated that the substance of animated beings does not differ from that of inert and insensible bodies; life lays hold of its materials in the physical world without thereby altering their fundamental properties, and death returns them unimpaired to that abyss of material substance, whence they have been for a moment abstracted to be clothed in ephemeral forms. Science has made a further step; she is not content to prove the true and lasting identity of the simple bodies diffused through the inorganic and the organic kingdom; by a re-union of all the parts she has formed, if not a living being, at least the constituent parts of organisms; she has not formed a flower, a fruit, or a muscle, but she has made the chemical principles from which they are extracted. Will she go yet further? Will she be able some day to control or order those mysterious forces which unite these principles, so as to make of them true organisms, and combine these organisms together, and cause them to co-operate in the formation of a common and individual action? We may doubt this, and it even needs some audacity to propound such a question. Such problems can only present themselves to us within that vague and uncertain limit which separates the domain of science from that of metaphysics. Happy are they who, limiting their desires and their hopes, are content to extract some secrets from the world of phenomena, patiently analysing its laws and registering its facts, without seeking to penetrate the very essence of natural forces, or of the substance which they put in movement! He, on the contrary, who takes in the whole world in his ambitious investigations, who will not accept the convenient duality of mind and matter, who wishes at least to reconcile their limits, and to fix their point of contact, condemns himself to strange doubts, which scientific certainty cannot

yet completely dissipate. Yet are there certain minds who cannot resist the attraction of these problems. Science always leads us towards man, and man towards philosophy. All optical science is in our eye—all acoustic science in our ear. The weight which old age drags, and which youth carries with so facile a grace, is that which binds the worlds in their orbits. The caloric which animates our bodies is a portion of the universal heat; the nerves are telegraphs which imprint upon the brain the sensation produced by our surroundings, and which transmit the dictates of our will to the senses. All the forces of nature, without exception, have been put in requisition to create the wondrous composition called man. Time, space, the world at large, can teach us nothing that we cannot study in him, and in him we shall find more than we can ever discover elsewhere. Man is not only a weight, a combination of chemical atoms, an aggregate of the most delicate physical instruments, he is besides all this, a personal force. It is not, therefore, without reason that biology or the study of life has been the keystone of the scientific edifice. After traversing the numerous circles of human knowledge, we are forcibly led to this centre, which on one side metaphysics takes as its point of departure, only studying the being in itself, without form or exterior support, without definite action upon that which surrounds it; on the other hand, science considers it chiefly in its manifestations, and only approaches by degrees that unknown which lies under the phenomena. These two methods each present a legitimate operation of the mind. To proceed from object to subject, or inversely from subject to object, is it not to clear the same interval, to pass over the same abyss? To study the relations of the corporeal substance with the hidden substance which regulates its movements, such is the grand problem of metaphysics; such also is the final aim of science. The former has more immediate reference to the mind, the latter to the life; but we do not know more of the mind than we do of the life, and under these differing terms is doubtless hidden one and the self-same mystery. Is the principle of life different from that of the mind? or, on the contrary, is it identical? Who are right, the materialists who identify mind and matter; the vitalists, who interpose life as a bond between body and mind; the animists, who make the mind the source and the principle, not only of intellectual phenomena, but also of organic functions? Such are the grave questions which I desire to examine with the aid of the most recent labours of metaphysicians and men of science. The physiological school of Montpellier did not invent vitality, neither did Stahl discover animism; the germs of these great doctrines are to be traced in the remotest antiquity. In reality, one can scarcely apprehend that man exists without demanding from himself, in terms more or less precise, what relation he bears to the rest of the world, in what manner he differs from inert

matter, if the secret principle which gives him life and thought must die with him or survive him. But these formidable questions do not assume the same aspect in the minds of all, and even in the same individual there are moments when they are rejected as useless, and other moments when they intrude themselves with irresistible authority. That which is true of man is true also of humanity. One of the strongest attractions of the history of philosophy is to show the successive weaknesses, the victories, and transports of a great soul which develops itself in time and circumstance. A rapid glance at the modern treatises will show what numerous solutions the problem of the mind has already received on the part of the materialists, the animists, and the vitalists, in France and Germany; we shall endeavour to show in what the several schools differ, and what sources of enlightenment must be sought from natural as well as from historical science.

The exact difference between mind and matter was not so distinct or so complete in past times as it has become in our own day. It may be said that for ages spiritualism and materialism have been confounded together, like the commingling of two streams whose waters unite. With the Greeks, enamoured of beauty of form, we find an instinctive tendency to substitute matter for mind: Thales recognised in the mind a force, a principle of activity and movement, but their notions of the corporeal and of the spiritual essence, were so indistinct the one from the other, that the same philosopher, perceiving the attraction of the loadstone for the iron, did not hesitate to endow it with a soul.

In the Pythagorean school we may observe the first effort towards what may be called the analysis of mind; it attempts the classification of functions and of attributes. Pythagoras distinguished the reasoning and immortal mind, offshoot of the universal mind, and echo of the universal harmony, from the unreasonable and ephemeral mind. Anaxagoras clearly distinguished the sensational mind from the reasoning mind, endowing animals and men alike, only that the reasoning mind united to the body of an animal was destined to a state of inferiority. In this system it is the body which perfects the mind, and is the limit of its development. Epicurus attributed even less to mental power, nor did he distinguish between the reasoning and the sensational mind; but his analysis cleared the way for a deeper research into sensational phenomena. He foresaw the distinction, so well established by modern physiology, between animal life, properly so called, and the life of vegetables. Plato unhesitatingly sacrificed matter to mind; comparing the soul to a pilot, of which the ship is the body; he asserted that their union is a temporary violence, and death a deliverance; a doctrine at least seductive and ideal. Although Plato discerned in the mind a principle unique and eternal, he recognised three functions in

it, namely, sensibility, desire, and reason. The first two are only in play during the short marriage of mind and matter; once set free, the mind ceases to feel and to desire, and immortality is only found in the reason.

Aristotle did not, like Plato, recognise the entire independence of mind and body; he did not, as the latter had done, dig a gulf between the two substances. Above all, he regarded the mind as a force, a powerful principle of activity: with him, the mind is not the body, but it cannot exist without the body; as, for instance, there cannot be weight without a body having weight; nor light without a luminous body. This doctrine may be interpreted in favour of more than one theory; the ancients and the stoics chiefly forced it into materialism, the Christian philosophers endeavoured to reconcile it with spiritualism. But the spiritualism of the ancient fathers gave a far wider scope to matter than modern spiritualism allows; to the body was assigned not only sensibility, but also common sense and memory, a kind of judgment; they only reserved to the immortal *animus* the most subtle powers of reason. Saint Thomas, the angel of the school, had, to use the words of Pascal, duly recognised the rights of the *brute*; he thought it amiss that Plato, in his sublime scorn, should pretend that the destiny of the mind was not to be united with the body, but to be definitively separated from it. He did not, for his part, consider them complete, the one without the other; he did not place the mind in one definite part of the body: it is everywhere, it is a substantial form, it does not differ from the vital principle. "The mind," he writes, "is so much the reality of the animated body, that it is through it that the body exists, that it is a bodily organism and a living faculty." This doctrine was the general belief of the middle ages. The mind united to the body enjoyed its complete life; separate from it, it existed only as a kind of dream; the dogma of the resurrection of the body completed that of the immortality of the soul. Thus Catholicism, whose greatest strength lay in harmonising itself with the most instinctive and spontaneous wants of human nature, felt the necessity of making the resurrection of the body the completion of immortality. The desire of immortality is felt, as much and as often for the sake of others as for our own. That which is repugnant and saddening to us, is the thought that those whom we love, those whom our hands, our lips, our eyes, have met, those whose life has been bound to our own with ties so sweet and so strong that we had thought them indestructible, should disappear, and be lost in annihilation. We wish them to live again, but our thought can only clothe them with immortality in the form which has been familiar to us, and since this has changed with time and years, our hope fixes it and clothes it with the features with which we have been most deeply impressed. The mother bending over the cradle of her newly-born,

can she see it in heaven otherwise than with the innocent graces of infancy? The poets have comprehended this want of our nature; when Virgil and Dante conduct us to heaven or to the infernal regions—what do we find there? The earth. When man will only listen to his hopes, he strips himself of cold reason, that he may be dominated by sentiment.

The disunion of mind and matter was never complete among the disciples of the Aristotelian school, and those philosophical reformers who aimed at founding independent doctrines yielded this point to the opinions of their time. Bacon, exclusively physician, recognised vital and corporeal, as well as invisible mind; Van Helmont gave a precise form to the doctrine now understood by the name of *Vitalism*; he admitted that the principle which gives us life is distinct from the mind. This principle, named by him *archeus*, serves to unite the spiritual and corporeal substances. Wherever life exists there is the *archeus*: each organ has its own *archeus*; but in the living being this is subordinate to a central *archeus*, which in man is again under the subjection of the mind.

Descartes tore asunder the ontological tie which united mind and matter: to the first he attributed thought, to the second extension, and thus left them face to face, in eternal opposition. Up to his time all the doctors, whether theologians or philosophers, had given extension to mind, infinity to the Deity, and a finite nature to angels and to reasoning beings. This great philosopher revived the science of metaphysics, divided substance into two parts, without always explaining the reciprocal action of each one to the other. Where there is no thought, he saw only material movement; animals were reduced to the state of simple automata; the mind of man found its confines in the thought—the secondary need of sensibility was wholly abandoned to the animal mind. Nothing is more curious than to observe these great intellectual revolutions which take place among mankind. While for many ages the attributes of extension and thought had remained confounded together in all theories, they suddenly became detached one from the other, and the world found itself doubled. The incompatibility of extension and thought was universally accepted, and the Cartesian doctrine has left traces so profound that even in the present day no philosophical mind is uninfluenced by it, but, even while protesting against it, shows the marks of the chain which it has broken.

The founder of vitalism, Van Helmont, endeavoured to reunite the two substances by an intermediate vital principle. The attempt which Liebnitz made with the same purpose is well known, being the original theory of pre-established harmonies. God intervenes here directly; in His hands He holds the threads which animate the body and those which move the mind; all the modifications of the one correspond to the modifications of the other, arranged from

the very origin of all things. This ingenious system pleases, but it is so artificial that opinion rejects it, almost without the aid of reason. A mind which represents essentially the body, a body the essential instrument of the mind, this mind and body nevertheless strangers to each other, except that which proceeds from the external will of the Divinity—such is the system of Liebnitz.

About the same epoch a very different doctrine was promulgated, which wholly subjected the material substance to the spiritual substance; this is the *animism* of Stahl, the physiologist of Halle, and the celebrated author of the ‘*Vraie Théorie Médicale*.’ Matter was reconciled with mind by becoming its docile slave, its outward and spontaneous expression, its perpetual product. In this case the mind constructs the body, an intelligent force choosing its materials from the inorganic world assimilating them, impressing upon them a special form, endowing or clothing them with new properties, compounding their organs, and grouping them in such a manner as to co-operate in the development of a living being: the nutrition, the circulation of the blood, the respiration, are its manifestations, as well as the thinking powers. None of the acts observed in the living organism are effected by the body alone, but by the mind, the principle and cause of life. This it is, according to Stahl, that preserves the body, that develops it, fits it for its purposes, for the body is made for and by the mind, rather than the mind made for and by the body. Here then, it may be said, is a very wise mind! If it discerns the nature of its organs, why suffer them to be weakened by disease, without endowing them with the power to preserve health? Why permit death to seize them, having the gift of life to bestow? She is, therefore, bound by some fatalism in her affinities with the organism, although the latter be her own immediate workmanship. Here we trench upon the most delicate portion of the problem of mind.

May this mysterious substance be identified with the *ego*, or, in other words, must every operation of mind be accompanied by the phenomena of conscience and liberty? or must we rather admit that mind is not intelligible even to itself, and is free only in certain acts, and that it can pursue a dull and hidden toil in the domains of those objects which have direct reference to life, beside and beneath the operations of thought. The school of Descartes confounded mind with the *ego*; the animists only acknowledge the *ego* to be one of the expressions of mind, and that it exists even where there is neither consciousness nor liberty—in sleep, in ecstasy, in madness, in the instinctive and spontaneous completion of all the organic functions. Physiology and psychology are thus confounded. At the lowest degree of animist phenomena commence the functions of nutritive life, regular as to their principle, fixed by an instinct which never deceives, perfect in the embryo as in the adult. The functions of relation hold a higher place; by them the being is in affinity with

the external world; the mind is compelled to educate the senses and to direct the movement of the locomotive organs: all its solicitude is held in suspense during the period that its movements and its sensations continue in disorder. In proportion as the acts of this life of relation fulfil their task more easily, with habitual exactitude, the mind, less absorbed, little by little loses the consciousness of it; enters more freely into the world of thought, yet ceases not to act instinctively in all the phenomena of vitality.

Is such a system materialistic, or is it spiritualistic? It would seem that this question cannot be answered with certainty. To identify the vital principle with the mental principle is, perhaps, logical; but doubtless it is to approximate the intellectual phenomena to the vital phenomena, which we are naturally disposed to regard as phenomena of a purely material order. In the animalism of Stahl the organic phenomena, it is true, are never referred to the body, and in this sense Stahl is removed from materialism; but instead of being joined to the *thinking* mind, and having consciousness of its operations, they are joined with the non-thinking mind, acting without will, without ideas, or at least without the consciousness of this will and of these ideas. This contrast between the conscious and unconscious operations of a unique agent has impressed many minds, and the theory which is named *Vitalism* has no other object than to efface this, and to attribute to distinct agents these diverse operations. Can they admit the existence of a double force, to explain, on the one part, that which relates itself to the organization, properly so called, and what, on the contrary, emanates from the thinking mind? That would seem so much the more doubtful since consciousness deserts us, and leaves us at fault, not only in the performance of certain organic actions, but even in that of thought itself. It often allures us, dominates us, carries us to new scenes without our opposition or resistance as conscious individuals. Something suddenly arouses us as out of the middle of a dream, and it is then only by a sudden reaction that we return into the path we have travelled over, and that our thought manifests itself to the consciousness. If the mind ceases to be mind in those moments when she ceases to have consciousness of herself, to what guide shall we then be given up when we follow the capricious flight of certain ideas our memory brings together, confusedly and without apparent order? Who has not yielded to the oppression of a thought that he had never invoked, starting up perpetually against the rebellious will? Who has not experienced presentiments or felt the goad of a thought wholly unexpected? Who has not in moments of introspection made acquaintance with thoughts and images, with combinations and hopes, which a moment after, lit up by consciousness, have filled him with trouble and sometimes with shame? There is, therefore, in the mind itself, in its purely ideal operations, something of

unconsciousness, of fatality, a part abstracted from the law of liberty and of reason. It is, therefore, wrong to invoke the phenomena of consciousness in order to divide the internal being into two parts, and to distinguish the mind from the vital principle.

Nevertheless, this is what all the vitalists have done, from Barthez down to the present day. Also their theories, are they less interesting from the proposition of the mind's affinity with a hypothetical vital principle, than from the physiological point of view, properly so called? The vitalists, for the most part medical men, have nevertheless demonstrated that the explanation of the phenomena of living being is incomplete with the intervention only of inorganic forces—light, heat, gravitation, chemical affinity, electricity. This, it may be affirmed, is the strong point of the vitalist doctrines; apart from mechanical, physical, and chemical forces, they admit of special forces which act primarily as auxiliaries and counterpoises in the living-being. All vitalists are agreed on this point, they only differ when proceeding to define the plastic forces which give form to the living-being. Barthez, the celebrated founder of the physiological school of Montpellier, recognised one vital force only, the unique cause of all the vital phenomena of the human body; but the difficulty which the vitalists met with in defining the *vital principle*, to show how it demonstrates itself simultaneously in the body and mind, this by degrees compelled them to limit themselves to discover in each particular phenomenon the particular force which produced it. They were thus led to reject the unity of the vital principle, to localise the vital forces in the different organs, the seat of irritability in the muscles, of sensibility in the nerves, &c. From this point of view, it becomes easy to look upon matter as susceptible of self-organization—that is to say, materialism. From thence, in truth, the vital school of Paris took its rise, the rival of that of Montpellier. *Organicism* is the barbarous name given to the doctrine which long prevailed in the Academy of Medicine of our capital. Following the adepts of this theory, force is a special faculty inherent in organised bodies, a law of life. Yet more, it is the life itself, the completion of the phenomena which compose it; vital force is no more a cause, an agent to explain organization; it is a phenomenon, an effect of this organization itself. M. Cayol, who long upheld this doctrine in 'L'Union Médicale,' compared vital force to attraction, stating that it is the law of organized bodies, as attraction is the law of inorganized bodies. Life thus constituted becomes an effect only, a mode of existence of the organism, as attraction is a mode of existence of heavy bodies; the true and only cause is in God. Thus, on one side we approach materialism, on the other mysticism; we accord everything to matter, and prudently shelter ourselves under the name of the Divinity.

Discussions, at first sight confined to the narrow stage on which

life appears bound up with the mind, and the mind with life, burst through these limits, and an invincible logic impels certain doctrines in the direction of pure and simple materialism, the others towards idealism, properly so called. Characteristic circumspection in our country usually arrests the mind on these fatal descents; but in Germany they allow themselves to be carried away without resistance: theories there assume forms more systematised and original. Beyond the Rhine, it is no more a question of vitalism; materialism there boldly asserts itself; writers and men of science, animated with ardent zeal and incontestable talent, tear off all the disguises of the ancient metaphysics, attacking it with the fury of idol-shattering iconoclasts. Elated by the discoveries of modern sciences, ardent friends of political and social progress, they accuse metaphysics of having too long sent the mind of their country to sleep by sophisms and chimeras, rendering it indifferent to liberty, by exhibiting to it all things submissive to eternal and necessary contradictions. Charles Vogt, Moleschott, and their followers, use their materialism in the service of political radicalism. The former, early known to fame, as the fellow-labourer of Agassiz, and the author of scientific works highly valued, occupied the extreme left in the parliament of Frankfort in 1848, and there delivered certain speeches full of eloquence. He is now proscribed, and lives an exile at Geneva, where he has become professor of geology, and a member of the council of state.

According to Vogt, the brain secretes thought as the liver secretes bile; the body is only a certain combination of matter subservient to diverse actions; the mind is but the result of complex forces developed in the animal organism. These doctrines are set forth in the '*Tableaux de la Vie Animale*' of the professor of Geneva, and in his '*Lettres Physiologiques*.' "The development of the intellectual faculties," says Vogt, "keeps pace with the development of the brain, with the improvement of its parts, with the consolidation of its substance, precisely in the same manner that in other organs the development of the function keeps pace with the development of the organ. The same theory must consequently be admitted for these functions as for those of the brain, presuming that the functions of sight, of hearing, of the circulation of the blood, and of respiration, are no more inherent in the organs, and that they continue after the annihilation of the organs, in such a manner that sight, hearing, the circulation and respiration continue even after death, even at the time that the eye, the ear, the heart, and the lungs have been long since annihilated and decomposed. The absurdity of avowing such a thing is obvious. Thus, it will be said, the door is opened to downright materialism! What! man a mere machine like the other animals, thought the result of a fixed organization, and, as a result, the freedom of will destroyed! Every modification of the function infers a material change in the organ which precedes it, or rather which takes place

at the same time ! I can only reply by saying :—‘ In truth, thus it is, thus it is.’ ”

In the foremost ranks of the positive school of Germany, we find M. Moleschott, professor of physiology at Zurich. In his letters addressed to the famous chemist Liebig, and collected under the title, ‘ *The Circle of Life*,’ the doctrine of the soul, of immortality, of human liberty, the hypothesis of final causes are attacked with vigorous eloquence. To M. Moleschott matter, only is immortal, subject to incessant transformations. Force cannot be conceived to exist apart from the material substance, and the mind cannot be thought of as apart from the body. A force without material agency which supports it, is an image absolutely void of reality, an abstract idea deprived of sense. “ To uphold the existence of vital force,” he says, “ we rely upon that which we cannot produce in animal or plant ; but are we then able to create at pleasure every compound mineral, even when we know its component parts perfectly well ? And yet who attributes a vital force to the mountain ? ” All the science of life is but an extension of chemical and physical science, thought reduces itself to a movement of cerebral matter, as sound is the result of the vibration of the air, and light of æther. We are plunged into a sea of moving substances, and we are ourselves but a wave among the waves of this infinite ocean. As to our will, it is the necessary consequence of all the movements which we produce, and, as the planet is fixed in its orbit, so is it invincibly bound to a natural and general law. “ If any statesman,” writes the pitiless author, “ or more probably some pedant of the study, objects that whoever denies the liberty of the will cannot attain unto liberty, I reply that he is free who has acquired the consciousness of feeling his own existence face to face with nature, the evidence of his existence, of his wants, his desires, his exigencies, the limit and the range of his activity.”

There are many other names yet to mention besides those of Vogt and Moleschott, to show the energetic reaction of Germany at this time against the metaphysical doctrines with which she was, as it were, intoxicated during the former half of this century. The fundamental doctrine of the new school is, that there is nothing real without substance, nothing eternal, except substance, except the atom. Hear M. Dubois-Reymond, the able physiologist of Berlin. “ Matter and force complete one the other, reciprocally suppose each other ; isolated, they have no existence ” he writes in the preface to his great work upon ‘ *Animal Electricity*.’

M. Hermann Burmeister, professor at Halle, and an eminent zoologist, affirms, as do Vogt and Moleschott, that the mind is but the result of forces inherent in the substances united in an ephemeral animal organism. M. Büchner, professor at Tübingen, in his works entitled ‘ *Force and Matter*,’ and ‘ *Mind and Nature*,’ has,

engrafted the modern materialism on the old atomistic theory. "The atom, or the smallest indivisible and fundamental part of matter, is the deity to which all life, the lowest as the highest, owes its existence. Existing from all eternity, the atom participates in an eternal evolution without truce, to-day in this form, and to-morrow in another, and it remains identical with itself in the midst of all these transformations, always the same, immutable. The same atom which beforetime helped to form the stone, the air, the water, at the present time forms a part of the body, and perhaps at this moment participates in the most complicated labour of the intellect, soon quitting its theatre of activity, returning into the permanent round of material exchange, and following the most diverse paths. Do you not here recognise something which is everywhere the condition and cause of all things, without which neither form, nor thought, nor body, nor mind, nor in general any existence, could be possible, and which, as a consequence, in the eternal metamorphosis of all phenomena, is alone worthy of the name of principle? This unique thing is the atom or substance."

In this concert, in which Germany vaunts the material substance, discord is always to be found; idealism yet has eloquent and clever advocates. I desire no better proof of this than the posthumous fame which attaches to the name and to the works of Schopenhauer. This eminent philosopher, who through the whole of his life was unable to break through the circle of indifference and neglect which soured his genius, now finds passionate admirers. He beguiles by the depth and originality of his views, by the vigour of his style, and even by the haughty and bitter melancholy which from idealism conducted to quietism, and even as far as the *nirvāna* of Buddhism. Schopenhauer sets out from the absolute scepticism of Kant, and entertains a suspicion of the reality of the exterior world, and of ephemeral appearances. How did he resolve this doubt? Not after the manner of Descartes, by saying, "I think, therefore I am." It is by making an appeal to the will: his formulæ is:—"I am, because I will to be." The will is the force which is mistress of the world, conscious in men, unconscious in nature; it is the activity which creates all phenomena, intellectual as well as material. "The body," writes Schopenhauer, in his principal work, entitled 'The World as far as Will and Performance', "is nothing else but the will interpreting itself visibly, the objective will." It is by it that our faith in immortality is explained. If we desired not to live to-morrow, we could not live to-day, but wishing to live to-morrow, is it not to wish to live always?

As the will is the thing itself, the internal substance, the essence of the world as of the other part of life, the visible world, the phenomenon is but the mirror of the will. The German philosopher infers from it that life accompanies the will as invisibly, as inseparably

as the shadow follows the body. To live always, it needs but to wish it. He does not pronounce hesitatingly the famous "*to be or not to be*," he firmly believes that it only depends upon himself to prolong the union of the will to a form which is its instrument. But what if this union is not happy, if this immortality is but a chain, if nothing can break it, not even suicide, for this only shatters the body, what is left us except to destroy within ourselves the will to live? All you who are weary of bitter destiny, of the pitiful labour of daily life, wounded in your hopes, your desires, seek oblivion in yourselves, sacrifice your individuality, plunge into the Lethean flood of self-abnegation. "Thus," says Schopenhauer, "in the contemplation of the life and practise of the saints, we recognise the sombre impression that nothingness which floats, as the ultimate end, behind all virtue and all sanctity, and which we fear to dispel, as children fear the dark. I confess willingly, that which remains after the entire destruction of the will seems to all those who are yet imbued with the desire of life, a mere nothingness; but, on the other hand, for those with whom the will is renounced and denied, all this world so real, with its suns and its milky ways, in its turn is but naught." Thus this philosophy, which rests its base upon the will, has likewise for the top-stone the destruction of the will. The work of Schopenhauer, so rich in details, of so profound discernment, resembles a palace built upon the borders of the sea; we admire the sumptuous façades, the long porticos, one walks through well designed alleys, among clumps of verdure; but shortly we arrive upon the shore, where ocean opens his caves and murmurs that monotonous chant which summons thought to eternal repose.

We have opposed Schopenhauer to the contemporaneous materialists of Germany; but the animist school numbers other representatives beyond the Rhine. M. Herman Fichte, the son of the celebrated philosopher, has attempted to re-animate animalism in his *Anthropology*. He attributes to the mind a real and individual existence. In his system, each particular mind itself organizes the body which is appropriated to it; this last is not, as in the doctrine of Schopenhauer, an objective will; it is mind manifested in time and space. The mind, then, may be extended? Yes, and no; for it is not limited geometrically by the body, it has yet a definite abode, that which M. Fichte names—an internal body (*innerer Leib*), endowed with organising power, and passing through successive evolutions from life to death. This is the new idea of the Anthropology—a strange and difficult one to comprehend. The internal body, this mystic bond between body and mind, is it not, under another name, the *archeus* of Van Helmont?

Among the German physiologists who support spiritualist doctrines, we must also mention Carus, the distinguished correspondent of the Institute of France, who was honoured with the friendship of Goethe.

It is necessary to go back to Plato, in order to find anything analogous to the doctrine of the learned professor, systematically exposed in a recent work, 'Nature and Idea.' As the title indicates, Carus accepts the body only an objective idea; the soul is the indestructible idea of the body, unconscious of that which relates only to organic transformations properly so called, conscious in the domain of thought, but always principle and cause of all the phenomena of the living being, from that of thought to the act of nutrition. The mind is not localised, she is not like the spider in the centre of her web: she has her seat in all the living cells, in each organized monad, of which each one is in a manner an abstract of the universe.

II.

What impression remains upon the mind after the examination of so many systems? At what fixed point can we stop? One thing is certain—it is this, that in order to explain life and thought, it is needful to interpose something more than the qualities known as that which is commonly called matter. In inorganic bodies, the combinations result from forces inherent to the very substances which combine themselves; but in a living compound, the power which forms and sustains the organisms, does not only reside in the properties of the elements: there is something else which preserves the equilibrium between the chemical affinity and the physical forces. What may this new agent be? Is it simple or complex? Vitalism is impotent to define this principle, which it interposes between body and mind. The animists leave indefinite all the space between intellectual and organic phenomena, and moreover, do not shew with sufficient precision all their bonds of union. In the inquiry of the problem of the mind, they take too limited a view of anthropology. Let them first ask what is the chief, essential, fundamental difference between the inorganic and the organic kingdoms, and the reply to this question will furnish a sure method by which to explore the general phenomena of the organic world, of which man forms a part, of which he occupies the highest place, but in which there is moreover something else besides.

If one considers the special characteristics of inert matter, and of that which is organised, one mark of difference (striking from its universality) is easily laid hold of: the inorganic substance is independent of time, the organic substance is dependent upon it: it is with it, as the geometricians say, a function; that is to say, the movement of time develops continual variations in it. The mineral never changes; it is to-day what it was yesterday, what it was in ages past. Without doubt, external agencies, chemical and physical, are able to alter and decompose it; but there does not exist in itself a cause of change, and in this sense it is never a function of time. This inertia,

this deficiency of variation removes from objects in the inorganic kingdom all characteristics of individuality. A crystal is not an individual: it possesses the property of special form, but here the limits have nothing fixed or determinate. This crystal may be considered as the aggregate of an infinity of similar small crystals; I can decompose them endlessly, and in each particle discover all the fundamental properties of all.

The organized being, on the contrary, by the very fact that it is modified during time, possesses a certain individuality which attaches itself to the aggregate of the organisms, on which time imprints changes; each of these molecules is indestructible alone, but their changing aggregate constitutes a little world, which is the individual. A variation cannot be understood without the force which produces it: all the varieties of the organised being must therefore be connected with correlative forces; but these variations are besides of one kind. Take man; if he changes from hour to hour, and from one instant to another, it is, firstly, because he is organized, but he has this character in common with all the other animals, and all the vegetables. There is a certain vegetative life diffused throughout the world, of which he partakes, and which represents a certain order of variations in the human body.

By the side of these variations, we observe others. Man is not fixed to the soil as the plant is; he has a life of relation, and organs which are its instruments. The acts of his animal life are not arbitrary; they are determined by the species to which he belongs. What is the force which subjects him to the exigencies of his species, and obliges him to perpetuate its type? It is instinct. In short, the circle of free and personal action is supplied by a force which constitutes individuality, and which is essentially the mind. The mind of the plant comprises only the force destined to the development of the vegetative life. The mind of the beast contains, besides that of the plant, forces of a new kind; the mind of man comprises at once the mind of the plant, of the beast, and a mind endowed with higher intellectual faculties. I would not attach more importance than is necessary to these words, mind of the plant, mind of the beast, so little capable of being strictly defined. What alone is important to be well understood is this, that in the forces to which our being is subjected, there is a prescribed hierarchy. Stahl and the animists go too far when they place the manifestations of the mind which are accompanied by consciousness, upon the same level as organised force, which manifests itself through a blind necessity. The first characterise us as individuals, and distinguish us from the rest of the creation; the second does not belong to us in particular, and only acts within us as it acts around us. "Consciousness," says Müller, "is wanting to vegetables from the absence of a nervous system, and yet there is in them an organic force operating according to the prototype of each plant." Consciousness, which does not

give rise to any organic product, and forms only ideas, is the slow result of development of itself, and it is bound to an organ upon which its completeness depends, whilst the first moving power of all harmonic organization continues to act even upon the monster deprived of an encephalon. The mind, as far as it is only organic force, manifesting itself after rational laws, must then be carefully distinguished from the mind which creates ideas with conscious intent. This simple distinction is not enough: psychology will only make true progress so far as it strives to make a complete analysis of the mind, as chemists make analysis of matter. It remains to separate in man the free and conscious portion of the mind from the part belonging to the species, for we are not only individual agents, we are part of a vast collection of beings formed upon the same type; our history intermingles itself with theirs, we inherit the past of humanity, and we transmit our legacy to the future. Besides the individual, besides the man, there is in us the animal, the vegetable, and below all that, the being already freed from physical inertia, but yet without form, and indeterminate.

An analysis of this kind, has something in it to tempt the philosopher, as much as the physiologist: the forces which hold our being in suspense are in ceaseless conflict; it is from this point of view that we must study the strange phenomena of sleep, of madness, of monomania, of death itself. In each of these phases the equilibrium is different. In the state of sleep we only live, as it were, a vegetative life, and perhaps besides this, the life of the species, for certain instincts of the species do not sleep. Dreams, which have been sometimes wrongly regarded as the freest flights of the mind, dreams shun the abstract and the ideal, and principally confine themselves to concrete images and objects: the thinking mind gives place to that of sensation. Monomania and madness are in one sense the reverse of sleep: the life of the species is therein sacrificed, all its wants are forgotten, sympathy, which in the order of nature attaches itself to the other members of the species, is stifled or at least deadened; individuality triumphs and seeks by all means to satisfy its fixed idea, be it furious or docile. The mind in this state of defiance, headstrong, isolated, becomes occasionally so independent of the organizing force, that it voluntarily sacrifices all the instincts, overcoming even the natural fear of death. The generality of physicians no longer doubt that suicide is almost always the effect of monomania. Forgetful of all, possessed by an unique idea which becomes all the world to him, which inexorably bounds the horizon of his thoughts, so that he discerns everything like the multiplying heads of the hydra, the wretched man, affected by this gloomy madness, in vain endeavours to fly from himself, and at last demands from death that repose he cannot find elsewhere. A too keen wound inflicted on the instincts of the species, especially on the affective instincts, also

destroys all the equilibrium of the human being, takes away all energy of personality, depriving it even of the sad power of formulating its grief, and plunges the man into that state which is called melancholy, a tomb in which he is buried alive. In that disease called reasoning mania certain instincts of the species are in a state of complete aberration, although the individual preserves all the faculty of judging and of reasoning. If physicians were philosophers, or if philosophers were physicians, what valuable observations should we not possess on all these strange phenomena! The most detailed analysis with which I am familiar is contained in '*Les Maladies de l'Âme humaine*,' a work of the German physiologist, Schubert, who was formerly one of the professors of the duchess of Orleans, and continued afterwards in correspondence with this eminent princess. He thinks that disease, in interrupting the equilibrium of the forces which work in unison during health, throws great light upon the relations between body and mind, just as a broken watch shews more plainly the mechanism which puts it in movement.

Instead of regarding the mind as it were from the centre, one should approach the consideration of it by degrees and from the circumference; instead of stating man as the immediate subject of philosophy, let us start from the outer, inert world, at the disposal of physical and chemical forces: what do we see result? Another world where the forms individualise themselves, and of which the continual mobility attests the presence of new agents! Minerals, plants, animals detach themselves, and appear to us as the steps of evolutions in nature rising higher and higher. And man! he appears at the summit of this vast series, species among the species, individual in his species. But between the species and the individual is there not yet something? Between the human type, as it can be anatomically defined, and this same type such as it manifests itself in each one of us, as free and isolated agents, is there not a gap? And this gap is filled by the very history of the human species; for we pertain to races, to varieties of the human race, and we all accept the heritage of a long past; we have, if we may be permitted to employ the expression, a historical mind—we are one of the links of a long chain; the individual mind gives out a note more or less sonorous; but this note enters into the harmony of the concert, and mixes itself with a chant that, without ceasing, swells and develops itself. The Germans, equally devoted to metaphysics and to the learned sciences, have always allotted to the latter their share in their great philosophical systems: they have sought (to employ their favorite expressions) the being in its origin, its origin in the being. There is not one of the great German thinkers of our time who is not preoccupied in seizing the development of a rational idea in the changes of history and in the succession of the diverse civilisations which have successively held the sceptre of human

thought upon our earth. Hegel, doubtlessly set out by logic, that is to say, by metaphysic; but he is immediately occupied in seeking the application of the laws of his logic, in the world of matter, and in the world of mind, that is to say, in nature and in history. The avidity with which in our country the public accepted the works of this critic, in which history controls philosophy, shews that the French mind is not so rebellious as might be believed to considerations which one might think it ready to condemn without appeal, when they have been met with in the region of Germanic reveries. What a change has taken place! In the last century they applauded the witticisms of Voltaire upon the Bible; at the present time they study the most austere works of the exegesis. The Homeric world is better known to us than it was to the Romans, so much has erudition penetrated into the depths of the study of the monuments of Greek civilisation. In going back towards the past, we see opening out on all sides the avenues that ignorance and religious fanaticism had long closed, but which lead to the most precious intellectual treasures.

However great may be the discoveries which are yet to be made, it is an assured principle that humanity has not always been exactly similar to itself. The ideas which constitute our most precious patrimony have had their history; civilisations, which are nothing else than the aggregate of ideas dominant at a certain epoch, and in certain countries, have not been servile copies one of the other; mental enlightenment has changed its place, but at the same time it has increased. This historic mind of which the first impulses and the most spontaneous testimony remains lost in the darkness of the past, develops itself from age to age, from nation to nation; never definitely fixing itself upon one particular religion, æsthetics, or philosophy. Happy are those who have the power to aid at the flowering periods of the human mind, during which art, faith, science, all are renewed; the mind, wafted by a favorable wind, seeks new shores, and the world seems to be coloured with clearer light. These periods of glad excitement cannot always continue, but they are never wasted: nothing is lost, nothing is useless. The impulse then given diffuses itself elsewhere, extends itself, and never stops. Newton stands forward in all astronomy. The civilisation of Greece has not perished; it still fills the civilised world. Who is not pagan before the Venus of Milo, or the models of noble Greece? Homer lives again in every one of his readers. Plato is not dead, and will never die. The sweet and solemn words which in the sermon on the mount gave consolation to the weak, to the poor in spirit, to the oppressed, re-echo still and will do so through all the ages. Who is not moved as if he heard them falling from the Sacred lips?

It may be apprehended that criticism and erudition allot too large a part in man to the ethnological and historical mind, curtailing unduly the domain of his individuality. It is, doubtless,

difficult to find the medium, but this danger should not blind us to the existence of an element in the mind which represents the general action of humanity upon each individual, according to the time, place, and circumstances. Do not deny liberty to man; but understand that liberty itself is not to be conceived free from struggle and resistance, and no effort is more meritorious than that which is exercised under the name of personal liberty against the tyranny which would impose upon us opinion, tradition, custom, good-sense, which are nothing else than the reason of the historic mind. Who does not know that these are the hardest forces to overcome, because they find an auxiliary power in ourselves? We wish to breathe the air of liberty, but our lungs are accustomed to the atmosphere of the age, of the nation, of the family, of a coterie. A hero worthy of the name is he who listening only to the voice of truth, stifles in himself all those fawning or irritating voices which urge him to lie and not to stand aloof from the current which impels the multitude and leads to easy success. Is, then, the part of moral greatness lessened by the avowal of the weight and resistance of those obstacles over which it has to triumph. Man, without doubt, is free; but then are there many men free? The multitude, does it do anything else than follow the collective mind which speaks in each of us? Many even have no desire to listen to this voice, and, claiming no part of the historic life of humanity, suffer themselves to live a purely animal life. The most zealous advocates of human liberty ought not to disregard that force which rivets us to our contemporaries and to our ancestors by blood, physical ties, moral, religious, and social influence. Nationality, patriotism, what are they but the noblest forms of that power which lays hold upon us in the cradle, and so often stifles in us the voice of truth and of reason.

The historic mind is, we may say, pre-eminently the human mind; animals have no history, the mind of the brute is a mind purely specific. Its instincts are perpetuated without change; individuals are only born for the conservation of a type, and to occupy one place in the picture. Some species, it is true, have disappeared after having lived long, but have they on this account a history? We can say nothing else of them than that they have been, and that they are not. Do we not offend our dignity by comparing the monotonous repetition of the phenomena of the animal kingdom with the drama of history, where races, nations, epochs express ideas, passions, and aspirations ever new? The mind which expresses itself in history is, so to speak, a sea, bearing on it the free, individual, personal mind—a sea which has its tempests and its calms, its currents and its rocks. Our liberty consists in finding our way upon it, in taking for our lighthouse and pole-star the ideal illumination of the mind. Whether the wave repulses or favours us, whether we advance or recede, our eye must be fixed

upon the end and aim; our glory is not in the success, but in the effort.

The problem of the mind has always been the chief object of metaphysics; but we see it also confronting science, when, rising by degrees above the laws which govern the whole world, it approaches the study of organized beings, and at last that of man, and of the great human family. The mind passes through a natural and simple transition from the inorganic to the organized world, from the stone to the vegetable, from the vegetable to the animal, from the animal to our own proper species. Metaphysics and science always apply different methods; the first views the mind as an indivisible whole, as an ideal entity, which is all sufficient and independent of the external world; science, on the contrary, seeks to analyse, considers it under many aspects, studies it from the outside, and in its connection with the whole of creation. There is, so to speak, no branch of human knowledge which does not furnish some element to this curious analysis; is it not time that metaphysics should at last draw from the treasures accumulated by the physical sciences, chemistry, physiology, zoology, ethnology, and history? A higher and universal science which includes at once the natural sciences and the historical sciences, might become the solid base of a philosophy whose doctrines established *à posteriori*, and not preconceived like those of the old metaphysics, this would be the *résumé* of all the events, of all the relations, of all the laws of which this world is at once the permanent and ephemeral expression, always old and always new.

Doubtless such a science will always remain incomplete; but what doctrine can satisfy the human mind? To complain that learning and science afford only imperfect solutions, is a reproach which is easily made against speculative philosophy. Has it not already built structures that it has boasted of as immortal, and of which nothing is left but ruins! Instead of halting unceasingly between the most opposite systems—from the grossest materialism to the most intangible idealism—may she honestly become the ally of science and found human beliefs, not indeed upon absolute certainty, but upon relative certainty, resting on a uniformity of laws more and more comprehensive. Recent efforts, such as those of M. Tissot, a philosopher who seeks the aid of science, and of M. Carus, a physiologist who attempts to found a metaphysical school, show that eminent men are prepared to sign this alliance. Both sides will find it advantageous; science will lose nothing of its rigour when her researches are made with a high and general aim; philosophy throws light on the problem of the mind when she asks of physiology, wherefore the phenomena of life cannot be explained by the simple play of chemical and physical forces, and of zoology, what is the nature of instinct; of medicine, what share the body has

in mental disease, or the mind in that of the body; and when ethnology is interrogated in order to discover what difference exists between one race and another; history and erudition, to ascertain how ideas have arisen and developed themselves in the world and in the succession of time.

The true analysis of the mind, is it not all contained in studies such as these? Is there not an immaterial principle in action in the *cosmos*, in the plant, in the brute, in the man? As the narrowing circles converge towards a common centre, in the same manner all the forces that we see playing their part in the world, upon the earth, in the groups of organized beings, concentrate themselves in the human mind as in a focus. There are within us many ideas which stamp us: one as an organized being; another as an animal; another as man; these ideas have one unique result, which is none other than the mind. This is what the animists clearly understand; only the mind, as they define it, possesses all these ideas alone—it creates them, the source of all is in itself. The mind of Stahl builds even the organs, and defines the bodily form which fixes the genus and the species. To resolve the question of the mind in these terms is to sacrifice the general too much to the individual, and to disown the essence of the ideal principle spread abroad in the world. Whatever in the infinite universe is a function of time, whatever has a history can only be the external development of a law, of a divine idea; shut out from the infinite in time, whatever assumes form or a transitory life enters these by thought. The animal species is ephemeral: it has a beginning and an end; it has its proper laws in what we call instinct. This collective consciousness is recognised in man so far as he belongs to a peculiar animal species; but do we not instinctively feel that this specific force, divided among millions of individuals, does not exclusively belong to the mind, as the Stahlians assume? It is something which imposes itself upon us and comes from without. How name that other feeling which animates us in the simple capacity of living beings, belonging to the organic creation of our planet, a creation which had its beginning and shall have its end? Nothing is to be accounted of lightly in our inner being; if the dull and obscure manifestations of life do not awake in us the phenomena of consciousness, they are not the less necessary; they are the base, the foundation, upon which the unfettered and personal mind erects its daring edifice.

There can be no doubt that the attention of the thinker always manifests a predilection for that part of ourselves which connects us directly with the life of humanity, and for that which limits the personal will upon the historic mind, and what I shall call the individual mind. Why be astonished at it? It is in this domain that our most cherished and most pressing interests are at stake; curiosity here becomes emotion, doubt becomes inquietude. We seek

the dread secret of our fate in retracing the wave of history, and in fathoming the abysses of our own proper thought. We feel that all our greatness is in reason and liberty. The triumphs of genius—the noble spectacle of right struggling against force—the upward aspirations of the religious soul—in a word, the human drama—this it is which always captivates our mind most forcibly. But in its silence and its majesty the world has something also to teach us. Beneath the numberless shows that it reveals to us, we likewise find thought. That we may thoroughly understand ourselves, we must equally understand what that is which is outside of us. When we have recognised, or at least divined the laws, the divine ideas which the body serves to express, we can look more firmly on our destiny and on our future. We ought to acknowledge the immortality of our material substance, as none of the molecules which compose it can perish; but we know that these elements now combined in the human microcosm must disunite and relapse into inorganic inertia. Immortal in our flesh, we are so equally in our mind, because every one of the ideas which it receives emanates from the Divine Thought. The organic creation may disappear from off our planet frozen by congelation, the species may be destroyed and give way to other species, nations have perished and left no history, individuals perish by thousands every day; but a thought develops itself through all these events—God lives in time, in creation, in history, in man. That which is divine in us cannot perish; our individuality only, that is to say our transient form, must fade away. The vase breaks, but the perfume which it holds preserves all its strength. We earnestly desire immortality in our actual shape, because our imagination, fettered by the senses, is powerless to conceive it otherwise. This yearning after infinity is the highest privilege of our nature.

It is, no doubt, useless to seek to fathom the mysteries of futurity: we shall never know ought of that bourne from whence, as the English poet says, no traveller returns. Let us study everything in the present, let us analyse our mind, let us understand our duty towards the animated creation, towards our species, our age, our country, and towards ourselves. Our task accomplished, we have nothing more (following an expression grand in its simplicity) than to commit our soul to God.

(From the French of AUGUSTE LANCEL.)

M. A. B.

The Progress of Psychological Medicine since the time of Dr. Caius: being the Thurston Speech for 1862. By C. LOCKHART ROBERTSON, M.B. Cantab., &c. &c. &c.

(Read in the Chapel of Gonville and Caius College, Cambridge, on Dr. Wendy's Commemoration Day, May 12th, 1862.)

THERE is no branch of the healing art in which modern medical science can point to greater results than in that which concerns itself with the care and treatment of mental disease—none which has made such progress since the time of our third and greatest founder.

Dr. Caius was in the height of his fame and practice when Henry VIII, in 1547, granted the revenues of the suppressed priory of S. Mary of Bethlehem to the City of London, for the reception of their lunatics, being the first authentic record we possess of the foundation in England of a hospital specially devoted for the reception of persons of unsound mind. It is, therefore, in the treatment of the insane in this and similar asylums that I propose tracing the progress made, since 1547, in the theory and practice of psychological medicine.

If I claim for this department of medicine the great advances which it has made since the days of Dr. Caius, I am also bound to admit of how recent origin this progress is. Indeed, it is only within our own generation—I might almost say, since the year 1839, when Dr. Conolly presented his first report to the Visitors of the Hanwell Asylum—that the system of non-restraint—on which all advance, past and future, in the treatment of the insane must be based—has been recognised as of universal application.

“Nothing, in fact,” says Dr. Conolly, “is more difficult to account for than the long neglect, in communities calling themselves civilised, of those afflicted with a malady so much the more dreadful than other maladies, that, before it destroys life, it may be said to destroy all that makes life valuable or desirable. No malady effects such wide destruction, or creates so much and such varied distress. It extinguishes knowledge, confuses eloquence, or buries it in everlasting silence; it lays waste all accomplishments; renders beauty itself painful or fearful to behold; whilst it breaks up domestic happiness and perverts or annihilates all the habits and affections which impart comfort, and joy and value to human existence. Yet nothing is more certain than that this complicated misery, including every other form of misery and mental suffering, has been not only the subject of neglect, but of most general abuse and cruelty in all ages, and even down to the times in which we live.”

The Hospital of S. Mary of Bethlehem, which, according to Stowe, as edited by Strype (little or nothing, save the name, occurs in the earlier editions), stood in Bishopgate Ward without the city

wall, in what was then open country, was first founded by Simon FitzMary, one of the sheriffs of London, in the year of our Lord 1246.

The original deed of gift sets forth a grant of his lands in Bishopgate without, to Godfrey, Bishop of Bethelam, and to his successors, and to the chapter of the Church of Bethelam, "to make there a priory, and to ordain a prior and canons, brothers, and also sisters, when Jesus Christ shall enlarge his grace upon it. And in the same place the rule and order of the said Church of Bethelam solemnly professing which shall bear the token of a starre openly in their copes and mantles of profession, and for to say divine service there for the soules aforesaid, and all Christian soules and specially to receive there the Bishop of Bethelam, canons, brothers, and messengers of the Church of Bethelam for evermore, as often as they shall come thither."

King Henry VIII gave this house to the City of London; they converted it to a house or hospital for the cure of lunatics. "This hospital (says Stowe) stood in an obscure and close place, near unto many common sewers, and also was too little to receive and entertain the great number of distracted persons, both men and women." The site of old Bethlehem is now occupied by Bethlem Court, off Bishopgate Street.

In 1675 the second Bethlehem Hospital was built in Moorfields. Stowe speaks of it as a stately and magnificent structure, "containing in length, from east to west, 540 feet, and in breadth 40 feet, besides the wall which encloseth the gardens before it, which is neatly ordered with walks of freestone round about, and grass plats in the middle. And besides this garden there is at each end another for the lunatic people to walk in for their refreshment when they are a little well of their distemper; this wall is in length 680 feet, and in breadth 70 feet, at each end being very high; and that part fronting the fields hath iron gates in several places of the wall, to the end that passengers, as they walk in the fields, may look into the garden. This large fabric is built of brick and freestone; the gate or entrance all of stone, with two figures of a distracted man and woman in chains (a curious piece of sculpture) over the gate. And in this, as well as in the building, the architecture is good. It hath a large cupola with a gilded ball, and a vane at the top of it, and a clock within, and three fair dials without. And behold, here is a map or prospect of the building fronting the fields."

Stowe proceeds to give an account of the general management of the hospital, from which I would gather, that in the earlier days of new Bethlehem—*i.e.*, in the latter part of the seventeenth century—a more humane system of treatment was pursued there than in the following century.

Besides the in-door patients, the governors of Bethlehem had out-

door patients or pensioners, who bore upon their arms the licence of the hospital. It was not until 1675 that this licence was in the 'London Gazette' thus formally withdrawn :

"Whereas several vagrant persons do wander about the City of London and counties, pretending themselves to be lunaticks under cure in the Hospital of Bethlehem, commonly called Bedlam, with brass plates about their arms, and inscriptions thereon. These are to give notice that there is no such liberty given to any patient kept in the said hospital for their cure, neither is any such plate, as a distinction or mark, put upon any lunatick during their time being there, or when discharged thence. And that the same is a false pretence to colour their wandering and begging, and to deceive the people, to the dishonour of the government of that hospital."

These out-patients, or discharged pensioners of Bethlehem Hospital, have acquired an undying celebrity through Edgar's feigned insanity, to save his life, as a bedlam beggar.

The figure is evidently drawn from life :

"Whiles I may 'scape
I will preserve myself: and am bethought
To take the basest and most poorest shape
That ever penury in contempt of men
Brought near to beast: my face I'll grime with filth,
Blanket my loins; elf all hair in knots
And with presented nakedness out-face
The winds and persecutions of the sky.
The country gives me proof and precedent
Of Bedlam beggars who with roaring voices
Strike in their numb'd and mortified bare arms
Pins, wooden pricks, nails, sprigs of rosemary;
And with this horrible object from low farms,
Poor pitting villages, sheep cotes, and mills,
Some time with lunatic bans, some time with prayers,
Enforce their charity."

D'Israeli, in his 'Curiosities of Literature,' devotes a chapter to the "Tom o' Bedlams," as these patients were called, and to which I would refer for further information.

"In consequence of the limited resources of the hospital," he says, "the governors relieved the establishment by frequently discharging patients whose cure might be very equivocal. Harmless lunatics thrown thus into the world, often without a single friend, wandered about the country chanting wild ditties, and wearing a fantastical dress to attract the notice of the charitable, on whose alms they lived. They had a kind of costume, which I find described by Randle Stowe, in a curious and extraordinary work ('The Academy of Armoury')—"The bedlam has a long staff, and a cow- or ox-horn by his side; his clothing fantastic and ridiculous; for, being a madman, he is madly decked and dressed all over with ribands, feathers, cuttings of cloth, and what not, to make him seem a madman, or

one distracted, when he is no other than a wandering and dissembling knave.' This writer here points out one of the grievances resulting from licensing even harmless lunatics to roam about the country; for a set of pretended madmen, called *Abram men*, a cant term for certain sturdy rogues, concealed themselves in their costume, covered the country, and pleaded the privileged denomination when detected in their depredations."

Steele, in the 'Tatler,' (June 18, 1789,) gives us a glimpse of how things in his day went at Bethlehem. "On Tuesday last (he says) I took three lads who are under my guardianship a rambling in a hackney coach, to shew them the town; as the lions, the tombs, Bedlam, and the other places, which are entertainments to raw minds, because they strike forcibly on the fancy." Again, in 'The World,' June 7, 1753, there is a paper by Moore, the editor, on the shameful practice of exhibiting lunatics in Bedlam, from which I make the following extract:

"To gratify the curiosity of a country friend, I accompanied him a few weeks ago to Bedlam. In one cell sat a wretch upon his straw, looking steadfastly upon the ground in silent despair. In another, the spirit of ambition flashed from the eyes of an emperor, who strutted the happy lord of the creation. Here a fearful miser, having a fancy, converted his rags to gold, sat counting at his wealth, and trembling at all who saw him. Here the prodigal was hurrying up and down his ward, and giving fortune to thousands. On one side, a straw-crowned king was delivering laws to his people, and on the other, a husband, mad indeed, was dictating to a wife that had undone him. Sudden fits of raving interrupted the solemn walk of the melancholy musician, and settled despair sat upon the pallied countenance of the love-sick maid. * * * I am sorry to say it, curiosity and wantonness, more than a desire of instruction, carry the majority of spectators to this dismal place. It was in the Easter week that I attended my friend there, when, to my great surprise, I found a hundred people at least, who, having paid their twopence a-piece, were suffered, unattended, to run rioting up and down the wards, making sport and diversion of the miserable inhabitants—a cruelty which one would think human nature hardly capable of! Surely if the utmost misery of mankind is to be made a sight of for gain, those who are the governours of this hospital should take care that proper persons are appointed to attend the spectators; and not suffer indecencies to be committed, which would shock the humanity of the savage Indians. I saw some of the poor wretches provoked by the insults of this holyday mob into furies of rage; and I saw the poorer wretches, the spectators, in a loud laugh of triumph at the ravings they had occasioned."

So also Mr. Pepys enters in his diary, "Stept into Bedlam, where

I saw several poor miserable creatures in chains; one of them was mad with making verses."

Hogarth's eighth picture in the "Rake's Progress" (at this moment in the Great Exhibition) drawn in 1735, and retouched in 1763, is evidently a sketch from the wards of old Bedlam. The ankle chains are on the rake who is dying in his wife's arms, the physician leaning over them; in one of the cells is seen a naked figure on a straw bed, the wrist-chains hanging over the bedstead; a crowned king sits in another cell; the mad astronomer is in the centre of the picture, while the cells are only dimly lighted by the small, unglazed high window, placed near the roof window—just as they were in the present Bethlehem so recently as in 1852.

"I have sometimes (says Charles Lamb) entertained myself with comparing the 'Timon of Athens' of Shakespeare, and Hogarth's 'Rake's Progress' together. The story, the moral in both is nearly the same. The wild course of riot and extravagance ending in the one with driving the prodigal from the society of men into the solitude of the deserts, and in the other with conducting the rake through his several stages of dissipation into the still more complete desolations of the madhouse, in the play and in the picture are described with almost equal force and nature. The concluding scene in the 'Rake's Progress,' is perhaps superior to the last scenes of 'Timon.' If we seek for something of kindred excellence in poetry, it must be in the scenes of Lear's beginning madness, where the king and the fool, and Tom-o-Bedlam, conspire to produce such a medley of mirth checked by misery, and misery rebuked by mirth—where the society of those 'strange bed-fellows' which misfortunes have brought Lear acquainted with, so firmly sets forth the destitute state of the monarch; while the lunatic bans of the one and the disjointed sayings, and wild but pregnant allusions of the other, so wonderfully sympathise with that confusion which they seem to assist in the production of, in the senses of that 'child changed father.'

"In the scene in Bedlam which terminates the 'Rake's Progress' we find the same assortment of the ludicrous with the terrible. Here is desperate madness, the overturning of originally strong thinking faculties, at which we shudder, as we contemplate the duration and pressure of affliction which it must have asked to destroy such a building; and here is the gradual hurtless lapse into idiocy of faculties, which, at their best of times never having been strong, we look upon the consummation of their decay with no more of pity than is consistent with a smile. The mad tailor, the poor driviller that has gone out of his wits (and truly he appears to have had no great journey to go to get past their confines) for the love of 'Charming Betty Careless'—these half-laughable, scarce-pitiable objects, take off from the horror which the principal figure would of itself raise, at

the same time that they assist the feeling of the scene, by contributing to the general notion of its subject :

“ ‘Madness, thou chaos of the brain,
What art that pleasure giv’st and pain?
Tyranny of fancy’s reign!
Mechanic fancy that can build
Vast labyrinths and mazes wild,
With rule disjointed, shapeless measure
Fill’d with horror, fill’d with pleasure!
Shapes of horror that would even
Cast doubt of mercy upon Heaven,
Shapes of pleasure that but seen
Would split the shaking sides of spleen.’

[*Lines inscribed under the Plate*].

“It is carrying the comparison to excess, to remark that in the poor kneeling weeping female, who accompanies her seducer in his sad decay, there is something analogous to Kent or Caius as he delights rather to be called in Lear—the noblest pattern of virtue which even Shakespeare has conceived—who follows his royal master in banishment, who had pronounced *his* banishment, and, forgetful at once of his wrongs and dignities, taking on himself the disguise of a menial, retains his fidelity to the figure, his loyalty to the carcass, the shadow, the shell, the empty husk of Lear.

“The Rake of Hogarth, when he is the madman in the Bedlam scenes, is a face which no one that has seen can easily forget. There is the stretch of human suffering to the utmost endurance—severe bodily pain brought on by strong mental agony, the frightful obstinate laugh of madness—yet all so unforced and natural that those who never were witness to madness in real life, think they see nothing but what is familiar to them in this face. Here are no tricks of distortion, nothing but the natural face of agony. This is high tragic painting; and we might as well deny to Shakespeare the honours of a great tragedian, because he has interwoven scenes of mirth with the serious business of his plays, as refuse to Hogarth the same praise for the two concluding scenes of the ‘Rake’s Progress,’ because of the comic lunatics he has thrown into the one, or the alchymist that he has introduced in the other, who is paddling in the coals of his furnace, keeping alive the flames of vain hope within the very walls of the prison to which the vanity has conducted him, which have taught the darker lesson of extinguished hope to the desponding figure who is the principal person of the scene.”

“The Report and Minutes of Evidence from the Committee appointed to consider of provision being made for the Better Regulation of Mad-Houses in England (ordered by the House of Commons to be printed 11th July, 1815),’ including as it does a full inquiry into the condition of old Bethlehem, at Moorfields, (new Bethlehem was just then building), will enable us to follow the history of that metro-

politan asylum, and thus obtain, doubtless, a fair sample of what asylums in England, even in 1815, were; and so shall we better be able to judge of the progress now gained in this department of medicine.

Mr. Wakefield gives evidence of a visit he made to Bethlehem, on the 2nd of May, 1814, in company with one of the governors and Mr. Western, M.P. for Essex. Attended by the steward of the hospital and a female keeper, he visited the women's galleries. One side of the room (he informed the committee) contained about ten patients each chained by one arm, or by the wall, the chain allowing them merely to stand up by the bench or form fixed to the wall, or to sit down on it. The nakedness of each patient was covered by a blanket-gown only; the blanket-gown being a blanket formed something like a dressing-gown with nothing to fasten it with in front; this constituted the whole covering; the feet even were naked. Many of the patients at this visit were found locked up in their cells, naked, and chained on straw, with only one blanket for a covering. One who was in that state by way of punishment, the keeper described as the most dissatisfied patient in the house. She talked coherently, complained of the want of tea and sugar, &c., &c.

In the male wing these visitors found six patients chained close to the wall, five handcuffed, and one locked to the wall by the right arm as well as by the right leg; he was very noisy; all were naked, except as to the blanket-gown, or a small rug on the shoulders, and without shoes. The nakedness of the patients and the mode of confinement gave this room (said the witness) the complete appearance of a dog-kennel. They saw a quiet, civil man, a soldier, a native of Poland, brutally attacked by another soldier, the keepers informing them that he always singled out the Pole as an object of resentment, and that there was no means of separating these men except by locking one up in solitary confinement. In the men's wing were about seventy-five or seventy-six patients, with two keepers and an assistant, and about the same number of patients on the women's side; those of the patients who were not walking about or chained in the side-rooms were lying "stark naked" upon straw on their bedsteads, each in a separate cell, with a single blanket or rug in which the patient usually lay huddled up as if impatient of cold, and generally chained to the bed-place, of the shape of a trough; about one-fifth were in this state or chained in the side-rooms. It appeared that the weak patients, and all who were inclined to lie abed, were allowed to do so from being less troublesome in that state than when up and dressed.

The physician, according to the steward's evidence, attended but seldom—"I hear he has not been round the house but once these three months." The apothecary attended for about half an hour daily. In certain months of the year particular classes of the patients were "physicked, bathed, bled, and vomited at given periods." The

patients, said Dr. T. Monro in his evidence, are ordered to be bled about the latter end of May or the beginning of May, according to the weather; and after they have been bled they take vomits once a week for a certain number of weeks; after that they are purged. That has been the practice invariably for years (said Dr. Monro) long before my time; it was handed down to me by my father, and I do not know any better practice.

A male keeper (the apothecary reluctantly witnessed) was appointed to the service of the refractory female patients. One female patient he also admitted had been pregnant twice during the time she was in the hospital.

The iron-barred windows of the cells, the steward stated, were not generally glazed, but closed only with a shutter. There was no warm bath in the asylum, and the one cold bath was so out of the way that it was rarely used.

The straw in the cells and beds was changed once a week, unless very wet; the patients in large numbers were locked by the hand to the bed at night. There was no night-watch in all the asylum.

The offices of religion were apparently unknown in the asylums of this date.

Verily the insane were then an outcast multitude.

In order vividly to see the progress which medical science has made since Dr. Caius's time, let us look at one of our English county asylums of to-day. A very good specimen is the Cambridge Asylum at Fulbourne, under the able administration of my friend Dr. Lawrence.

The first great fact observed is the entire absence of all means of mechanical restraint. Neither belt, strait-jacket, manicle, strong chair, or any other means whatever for restraining the patient, are to be found there. All appearance of a prison has also been removed. The windows have no bars, the doors no bolts, the entrance hall stands open, and apparently no external distinction is observed between this and any other large hospital for the treatment of disease. The whole asylum bears the aspect of some large house of industry. The female patients, seated at needlework in their day-rooms, or washing in the laundry, or cooking in the kitchen, or engaged in the various household arrangements, would hardly by a casual observer be recognised as persons of unsound mind. So, also, in turning to the male department. Parties of ten or a dozen working in the garden, or engaged in the detail of agricultural labour present little evidence of insanity. In the several workshops of the tailor, the shoemaker, the carpenter, the smith, the basket-maker, the baker, the brewer, are patients daily engaged at their respective trades. Employment and the confidence shown by the implements and tools intrusted to the patients have evidently replaced the old means of coercion and restraint. In visiting the several rooms at meal time

the greatest order and quiet reign. Grace before and after meals is repeated with all reverence, standing; the food is served on earthenware plates, the beer in mugs or tumblers, as in any other hospital. On the tables in the wards inhabited during the day are books and newspapers, and games—cards, dominoes, bagatelle-boards, &c. The walls are hung with prints—easy chairs stand before the open fire, burning brightly without any guard or protection whatever. The windows apparently open at will (only the opening is so arranged that no patient can throw himself out of it), and look on a wide landscape, and, being generally with a south aspect, the house is filled with the brightness of the morning sun.

One constant, careful, and anxious system of watching pervades all this apparent freedom. No patient is ever left at any time alone; the sense of moral control of his attendant is never away from his mind. By night the wards are hourly visited, and the slightest noise or restlessness seen and attended to with the prescribed remedies.

The means of employment are carefully adapted, under the control of the several officers of the asylum, to the peculiarities of each individual case.

The nurses who thus tend the insane are of the stamp of the S. John's Sisterhood, who now have charge of King's College Hospital. They are generally selected young, it being found by experience that young girls of twenty-three or twenty-four better adapt themselves to the varying character of their patients than those who commence the work with more formed mind and opinions.

The sanitary arrangements of these asylums are most carefully studied. Every ward is supplied with hot and cold water, and a warm-bath and a hot and cold shower-bath, and a filter to clear the drinking-water, and water-closets and urinals of the most approved construction. The infirmaries for the sick are supplied with every requisite treatment, and medical comforts are administered with a lavish hand. Every appliance that modern skill can furnish for the relief of suffering—German spring- and water-beds for the bed-ridden, sofas, reclining chairs, every variety and contrivance of bath, &c., &c., are to be found there. The English county asylum of to-day can challenge comparison in its healing resources, its quiet and comfort, its fittings, diet, and domestic arrangements; and, may I add, in the professional skill and reputation of its physician? even with the metropolitan general hospitals; nor will the Cambridge County Lunatic Asylum at Fulbourne suffer by contrast in these particulars with Addenbroke's Hospital.

There is, however, a dark side to this, as to every other picture of human affairs. There are a large number of hopeless cases of insanity—the idiot, the confirmed epileptic, the paralysed, the utterly demented—on whose weary path no remedial agencies can throw any

light or change, who are also the objects of our care. They are physically incapacitated for work ; amusement they cannot share in, but still they can be kept clean and quiet, and carefully nursed and fed, and so tended while life lasts. They require, indeed, a daily and hourly care and watching, often of the most varying and harassing kind, yet of which labour the remedial results can only be seen and recognised by those familiar with the symptoms and progress of chronic mental decay.

Again, we have recent and acute cases to treat, and in this task the resources of modern medicine are most triumphant. I cannot in this place linger on them, I can only affirm that the most violent cases of raving madness are all treated in our county asylums, without any mechanical restraint whatever, and that a week or ten days active treatment usually suffices to calm the violence and to remove the urgent symptoms of the disease.

The asylums on the Continent are still, in some places, much as they were in 1815 in England. Thus Dr. Corrigan, President of the Irish College of Physicians, so recently as the present year ('Ten days in Athens, with Notes by the Way ;' London, 1862), gives a description of the asylum at Florence, which would almost apply to Bethlehem of 1815. "The building," he says, "is ill-designed—a horrid array everywhere of iron gratings ; the sleeping rooms with square-barred openings into them, exposing the inmates, male and female, to the gaze of visitors. One of the first objects that pained me in my examination, was a weakly-looking young man under restraint. On his shoulders, and extending some way down his arms, was a cape of hard, thick leather, which had been let down over his head ; this, secured below, prevented his raising his shoulders. Round his middle was a thick leather strap, secured with an iron screw ; to this were attached handcuffs, in which his wrists were confined. Attached to the front of the seat of the wooden chair on which he sat was an inclined plane, in which were holes at intervals, and through these cotton straps were passed and tied on the under side of the inclined plane, securing his legs to it, as we see patent pens and pencils secured in a paste-board for exhibition in a stationer's window. I asked the particulars of his case. He had been five months ill, and had been for the last two months secured—confined as I saw him—because he had attempted his own life or been violent to others. The next patient I saw under restraint, was a man secured in bed by arm-straps, stretched and tied on his back, as we sometimes see St. Lawrence represented on a gridiron in a painting of his martyrdom ; but, in addition, there was stretched over this man, about a foot above his body, a strong web net, firmly strapped from side to side on the railings of his bed. I saw in the sick ward a very young man, neither sick nor violent, secured in like manner as the other, with body-straps not permitting him to turn

his body, with strait waistcoat, with legs in like manner secured to the foot of the bed. I was informed he was epileptic; that he had once broken his arm in an epileptic fall; that he had an attack the night before, and that he was thus secured lest he might have another. In one day-room I reckoned eleven or twelve of the men under restraint, with leather muffs on their hands, and handcuffs on their wrists, fastened by iron rings to a leathern belt round the waist, secured behind by an iron screw, which projected at least half an inch through an iron plate against the spinal region. I asked to have the strap loosened, and through all the clothes the skin was reddened by the working against it of the end of the iron screw. Lying or sleeping on the back, or even leaning against the back of a chair, was impossible with such an apparatus, and an accidental blow or push on the back would drive the projecting point of the screw against the back, causing pain or more serious injury. In every day-room there was one or more of the restraint chains, such as I have already described."

The old method of treatment, of which I have, in my account of Old Bethlehem, faintly traced an outline, and which apparently still lingers in Florence, had for its guiding principle the doctrine that the insane were dangerous and ill-disposed persons, requiring for their safe custody the most powerful means of restraint, and for their guidance the stimulus of fear. Hence, as we have seen, every means of intimidation were freely resorted to, and cruel physical restraint was an every day practice. Such was the system of treatment from Dr. Caius' time down to our own day. So recently, indeed, as in 1859, the Commissioners in Lunacy reported to Parliament, that this principle of coercive treatment, with its restraints, its neglects, its filth, was still practised by the Poor Law authorities on the lunatic inmates of the union houses; while the Royal Scotch Lunacy Commission, of 1858, exposed the existence of a similar plan of treatment by the parochial authorities in that country.

The recent progress made in the treatment of mental disease is based on the recognition of the physical origin of the disease, and still more on a fuller study of the laws of mental pathology, resulting in a knowledge of the motives and springs of action which influence the thoughts and conduct of the insane.

Prejudice and fear of personal injury, together with the general ignorance of mankind of the relations existing between mind and body, and of their mutual influence in health and disease, long impeded the application of the principles of rational medicine to the practice of lunacy. "The old system," says Dr. Conolly, "placed all violent or troublesome patients in the position of dangerous animals. The new system regards them as afflicted persons whose brain and nerves are diseased, and who are to be restored to health, and comfort, and reason. This simple difference of view it is which

influences every particular in the arrangement of every part of an asylum for the insane."

The modern medical treatment of the insane is thus directed to influence the mutual relations of mind and body; to soothe nervous irritation; to relieve congestion of the brain; to remove all cause of sympathetic irritation or disorder in other organs of the body, which may influence the mental manifestations; to improve the quality of the blood, on which, perhaps alone, the disease may depend; and generally, to apply the principles of rational medicine to the treatment of the special symptoms of each individual case.

I quote from a lecture of Dr. Conolly's read at Hanwell in 1847, and published in the '*Lancet*,' the following apt illustration, both of the influence of physical disorder on mental disease, and of its treatment in the same case under the old system of coercion, and then by the recognition of the influence of the existing physical disorder, on the mental manifestations:

"It was in the female infirmary at Hanwell, exactly seven years ago, that I found, among other examples of the forgetfulness of what was due either to the sick or insane, a young woman lying in a crib, bound to the middle of it by a strap round the waist, to the sides of it by the hands, to the foot of it by the ankles, and to the head of it by the neck; she also had her hands in the hard leather terminations of canvas sleeves. She could not turn, nor lie on her side, nor lift her hand to her face, and her appearance was miserable beyond the power of words to describe. How long she had been in this state it is not material to record. That she was almost always wet and dirty, it is scarcely necessary to say. But the principal point I wish to illustrate by mentioning this case is, that it was a feeble and sick woman who was thus treated. At that very time, her whole skin was covered with neglected scabies, and she was suffering all the torture of a large and deep-seated abscess of the breast.

"Let it be considered what must be the effect on the attendants of having customary recourse to the imposition of restraints, when such complicated suffering as this became comparatively disregarded by medical men, in consequence of the spectacle presented to them being at each visit, not that of a sick person requiring aid, but of a dangerous lunatic cruelly fastened and bound.

"But this patient was neither dangerous to herself nor to others. The excuse alleged for this mode of treatment was, that she would eat the poultices employed, and which contained lead, and that she was very mischievous: that was all. However, she was liberated; no bad consequences ensued, and, in a few weeks, I saw the poor creature at the chapel, and even heard her play the organ, which she had been accustomed to do, in the church of a village in Middlesex, before her admission. This patient died very recently, having, from

the time of her liberation from restraints, scarcely ever given any trouble to the attendants. Perhaps, if I had never seen such a case, I should have been less earnest to adopt the system which I knew had been tried at Lincoln, and slower to try to manage the patients of this great asylum entirely without restraints.

“Many a case was yet to be managed, in which every ingenious difficulty was created or encouraged to baffle this attempt; many anxieties were to be endured, many misapprehensions to be submitted to, and much suffered; but all is now passed, and I thank God, with deep and unfeigned humility, who has permitted this great experiment to proceed for full seven years without one accident calculated to discredit it, and with a general result on the asylum best known to those who knew the asylum before, and a general effect on all other asylums, in almost every region of the globe, which can never be entirely lost.”

Insanity is, however, a mental as well as a physical disease, and we are only one step forward in the modern progress of its treatment, by applying to the relief of the physical symptoms the principles of rational medicine. Another, and I think a more important, part of the duty of those called to “minister to the mind diseased,” consists in the careful study and application, both to the general conduct and government of the asylum, and to the treatment of each individual case, of the principles of mental pathology—of the laws which regulate the manifestations of the mind in disease.

Thus, in illustration of the application of the laws of mental pathology to the government of an asylum, may be quoted the law, slowly evolved through careful trials and observation, that insanity does not necessarily destroy the influence which order and regularity, and the force of example, exert on conduct, but that, on the contrary, the most riotous and disorderly patients, after arriving at the asylum perhaps bound hand and foot, and under strong escort, yet in a few weeks, often without any treatment, save the influence of the discipline and order of the house, become, though still as insane as before, quiet and orderly in their conduct, industrious, and obedient to the rules which regulate the daily life of those with whom they are associated. Were this influence not a law of mental pathology, we should have no alternative but to revert to the old restraint system.

Again, in the treatment of an individual case, the recognition in mental pathology of the law, that the mind and conduct of the insane may yet be influenced through the medium of the sympathies, at once gives us a powerful moral therapeutic agent, with which to combat insane delusion and conduct. This power of influencing the morbid sympathies of the insane, and so winning them to a healthier frame of mind, through lessons of patience and contentment, is a gift possessed in very unequal degree by the physicians and attendants who undertake their care—yet a power on the presence of which

their comparative success materially depends. "A faculty (says Dr. Bucknill) of seeing that which is passing in the minds of men is the first requisite of moral power and discipline, whether in asylums, schools, parishes, or elsewhere. Add to this a firm will, the faculty of self-control, a sympathising distress at moral pain, a strong desire to remove it, and that fascinating biologising power is elicited which enables men to domineer for good purposes over the minds of others. Without these qualities no one can be personally successful in the moral treatment of the insane. A mere amiable and feeble, or a coarse and uncontrollable mind, alike fail in this delicate duty; and if the possessor of such a mental constitution has the wisdom to estimate this duty at its full value, he must perform it vicariously. That so much of it may be so well done vicariously, by ordinary attendants, is a most happy circumstance for mental sufferers, and proves that the possession, at least in a moderate degree, of the qualities indicated, is consistent with a defective education, and a lowly social rank."

So, in the case of a strong delusion, the laws of mental pathology teach that reason and argument—owing, probably, to the excited or perverted state of the emotions—have no power in convincing the patient of his error, and of the unsoundness of his conclusions; but that, on the other hand, new scenes and active employment, which call healthy emotions into exercise, gradually lead the way to a cure, and that the delusion, thus avoided and treated, by degrees fades from the mind. Such cures of intellectual delusion, by work and by the moral discipline of an asylum, are of frequent occurrence.

Great thus though the measure of moral and physical liberty is, which the asylums of 1862 give to the insane, compared with the cruel bondage of irons, and of fear, which, as we have seen, was their portion from the time of Dr. Caius, even to our day, the asylums of the future will, I believe, through the fuller study and application to practice of the principles of medicine, and of the laws of mental pathology, extend yet wider the circle of their liberties, until, perhaps, the asylum itself become a needless therapeutic agent, and the treatment of mental disease (in the modified shape it will then assume) come to be applied, like that of any other malady, in the ward of a general hospital, and amid the yet healthier influences of home life.

Psychological Inquiries (the Second Part). Being a Series of Essays intended to illustrate some points in the Physical and Moral History of Man. By Sir BENJAMIN C. BRODIE, Bart., D.C.L., F.R.S. Longman, Green, Longman, and Roberts. pp. 247.

CRITES, a busy lawyer, and Ergates, a busy surgeon, being wearied of the din and smoke of the metropolis, gladly avail themselves of an invitation from their friend Eubulus, to exchange for a time the "fumum et opes strepitumque Romæ," for the pure and serene air of his country residence, where, engaged in horticultural pursuits and in the performance of social duties, he lives that calm and even life which some suppose to be attended with so little care, and with so much quiet happiness. Commencing at once with warm praise of the country, where the "harmony of rural sounds is so different from the discords of London streets," Eubulus passes on to a description of the advantages of the cultivation of the physical sciences, his friends joining in the discussion, and, as usually happens in books written in the mode of dialogue, conveniently making the objection which is so easily put aside, and often perversely missing the exact objection which they should make. In fact, if this were not professedly a popular work, something might be fairly said against the adoption of a method of writing, by which an author is enabled to wander from heaven to earth, from the origin of evil to the origin of species, from the perfectibility of mankind to the ill consequences of *ennui*, and, without logical connection, to join, by the merest accident or most abrupt transitions of conversation, subjects that have no further apparent relation to one another than that man is able to think about them. The book is not, however, written for the purpose of communicating any facts not already known, or any conclusions which others may not have arrived at; it consists of the pleasant garrulity of three old men, and its principle objects are two: 1st. To show that, for the solution of the complicated problem relating to the condition, character, and capabilities of man, the observations of the physiologist must be combined with those of the moral philosopher, either of which alone would be insufficient. 2nd. To point out of how great practical importance to the individual such researches are, as enabling him to understand how much he may contribute to the improvement of his faculties, and to his well-being in life. That this unpretending little book more than accomplishes its design in a simple, elegant, and pleasing manner, no one who reads wisely will for a moment doubt.

When science is so fashionable, and so much esteemed, that it can easily command on its gala days the willing and admiring services

of the beauty and dignity of the land, it might appear almost unnecessary to speak of the benefits which it has conferred on mankind. The old Norse fable, which relates how the mighty Thor, after trying to empty the drinking horn of Asgard, after wrestling with the old woman, and racing against the runner Lok, discovered that he had been drinking the sea, wrestling with time, and racing with thought, symbolized in his efforts the helpless contention of man with the supreme forces of nature. But man is not quite so helpless now as he was even in those days when there were giants. For, although he cannot drink off the sea, wrestle successfully with time, or win the race from thought, he has, by patient attention to the physical laws, succeeded in using the forces of nature most advantageously for his service; he has, by placing his human force in obedience to the laws of nature, gained many a glorious victory. He wrestles very much better with time, and races very valiantly with thought. It is science which has given him all his success; it is that which has rendered the intellectual work of the present age so much more profitable than that of any other age, as to have now become almost synonymous with civilization. And yet any one who devoted himself to the earnest pursuit of science, in the expectation of reaping some portion of the reward which such important services might be expected to obtain from the gratitude of mankind, would meet with a heavy disappointment. The true man of science does not work for public admiration; nor does he look to public gratitude as the reward of his toil; he knows full well the worth of these, knows that, notwithstanding the enthusiastic applause of the hour, the public would quite calmly allow him to starve on pure science. It is in the development of his own intellectual nature, in his own activity, that he finds his gratification; and while deriving at all times an even pleasure from such efforts, he is every now and then above measure rewarded by displaying some wonderful example of order and design in nature. But every new discovery reveals more plainly how much remains to be discovered; and, as it has been aptly expressed, the higher one rises the more distant is the horizon. The dwarf mounts on to the shoulders of the giant, only to find how much there is that the giant cannot see. Nothing, then, can be more puerile than the complaints sometimes made by certain cultivators of a science, that it is very difficult to make discoveries now that the soil has been exhausted, whereas they were so easily made when the ground was first broken. It is an error begotten by ignorance out of indolence. The first discovery did not drop upon the expectant idler who, with placid equanimity, waited for the goods the gods might send, but was heavily obtained by patient, systematic, and intelligent labour; and, beyond all question, the same labour of the same mind which made the first discoveries in the new science, would now succeed in making many more, trampled though the field be by the restless

feet of those unmethodical inquirers who, running to and fro, anxiously exclaim, "Who will show us any good thing?"

No one who takes a wide and careful survey of the present position of those sciences which immediately concern themselves with man's moral and physical state, can fail to conclude that we stand on the very verge of discoveries of vast importance. The physiologist is daily approaching nearer and nearer to the mental philosopher, while the latter has long since found it necessary to abandon an untenable position, and to accept as the basis of his fabric the discoveries of the physiologist. Psychology and physiology are two branches of one science—anthropology; or, perhaps, it might be said that physiology, drawing, like the roots of the tree, its support from the lower ground of matter, and psychology, like the branches, spreading out into a higher sphere, unite in a common trunk, and form therewith a biological unity. The pure metaphysical philosopher who, disdainful of physical science, cultivates mental phenomena on the basis of those infallible affirmations of consciousness which almost every second person does not understand, and every third person denies; who spins systems of word-philosophy out of his own mind, as the spider draws its web out of its own belly; who trammels the unwilling mind with the burdensome logic of the schools, and in other ways attempts violently to sever man's intimate relationship with nature, may soon retire to that pleasant suburban retreat where, with the calm aspect of a lofty philosophical disdain, he may, in company with the megatherium and other creatures of the past, look down, in undisturbed repose, on an age which appreciates him not.

There is some danger at the present time that the physical sciences, proud of the immense benefits which they have conferred on man, should assume, not perhaps too prominent a position, but a silent right, as it were, to despise a science the products of which are not of any immediate material utility to mankind. But if the mental exercise which a man uses in the pursuit of truth is more valuable to him than the truth, if the acquisition of knowledge is really subordinate to the cultivation of our faculties, if the individual is an end unto himself rather than an instrument for the accomplishment of something out of him, then, unquestionably, the study of mind has a better title to be called useful than the "bread and butter sciences" (*Brodwissenschaften*). "Those studies which determine the faculties to a more vigorous exertion will," as Sir W. Hamilton says, "in every liberal sense, be better entitled, absolutely, to the name of useful, than those which, with a greater complement of more certain facts, awaken them to less intense and, consequently, less improving exercise. On this ground I would rest one of the pre-eminent utilities of mental philosophy." The opinion of Sir Benjamin Brodie is scarcely less decided on this matter.

“These subjects, which may all be conveniently included under the name of psychology, constitute a science quite as real as astronomy, chemistry, or natural history; inferior to none of the physical sciences in interest, and I may add in usefulness. I know of no better exercise than that which these inquiries afford for the mind itself, especially as they tend to improve in us the habit of thought and reflection, as they enable us to form a just estimate of our own powers and of the nature and limits of human knowledge; thus rendering us more competent to pursue other inquiries, however different in their nature, with advantage. Observe that I suppose the study of mental phenomena to be properly conducted, and limited to its proper objects, without being adulterated by those wild speculations in which some have indulged, and which have given the science rather a bad reputation under the name of metaphysics.” (p. 16.)

And again at p. 18: “I believe that whoever would form a right estimate of himself and others; whoever would improve his own character; whoever aspires to the high office of ameliorating the condition of society, whether as a statesman, as a religious teacher, as the promoter of education, or in any humbler capacity, can in no other way so well qualify himself for his undertaking, whatever it may be, as by studying the laws which regulate his own mind, displayed as it is in his own perceptions, sentiments, thoughts, and volitions. This is the only true foundation of that great science which, for all practical purposes, is more important than anything besides—the science of human nature.”

More might be justly said, if it were necessary, in favour of the valuable services of psychology; but it will be sufficient here to indicate, that it may be of great advantage in pure physiological investigation. No one can read with care the records of the labours of such a physiologist as John Hunter, without being forcibly struck with the great influence which a feeling of the operations of his own conscious intelligence had in directing his investigations into the laws of action of that unconscious intelligence which forms and maintains the organism. Though Hunter himself might not have distinctly maintained it, yet it is difficult to believe that he did not feel that there is no more helpful principle in physiological labour than this—that the human mind follows consciously the same laws which the so-called vital, plastic, or organic force follows unconsciously, and, according to the degree of its training and development, reflects more or less clearly the physical laws of organization. It is plain that such a principle must be very carefully applied, lest it become the fruitful parent of extravagant hypotheses, and thus seriously impede knowledge; but it is not so plain that, with proper care, the cautious recognition of the so-called doctrine of final causes may not be advantageously combined with the application of

the inductive philosophy. There is some cause to apprehend that the world, from its horror of the metaphysical extreme, is rushing headlong into a materialistic extreme.

This is eminently an utilitarian age, an age which, after the fashion of Macaulay, "reduces the human intellect to the level of a saucepan," which lauds an inductive philosophy that Bacon would scarce have known, in a way that would have extorted an exclamation of wondering surprise from Bacon; which appears strongly to suspect that Plato must have been mad on every point, and Aristotle mad at least on one point; which detects mysticism in idea, and madness in mysticism; which has a sure faith only in the idea when it is embodied in a steam-engine or in a cotton-machine; and which labours with a mechanical constancy to root out individuality, and to reduce men to a dead level of monotonous uniformity. All this may be right, but it has by no means yet been proved to be so; and meanwhile there is some reason to believe, that there is truth in Plato as well as in Bacon, that the words which were the expression of so powerful an intellect, and which have endured so long, are not utterly meaningless. And if they have a signification, then the truth which they contain is reconcileable with the truth which the investigations of the present age disclose; and if we do not perceive the relationship, the fault is ours, and the labour to reveal it must be our duty. It is not, perhaps, to be expected that the multitude, who feel so vividly the advantages which they derive from the physical sciences, should exercise moderation in their estimate of them; but it will be a great evil, as Sir B. Brodie has pointed out, if the cultivators of science themselves become influenced merely by utilitarian views. "The period has arrived when the discoveries of science, the achievements of former generations, are becoming extensively applied to the purposes of commerce, of manufactures, and the ordinary concerns of life. Then the numerous examples which have presented themselves of late years, of large fortunes rapidly accumulated, have afforded an additional stimulus (where none was wanted) to the natural desire of wealth; while the prevailing study of political economy, with all the great good which it has done, has produced this evil, that it has encouraged the disposition, in a large portion of society, to regard the increase of wealth, and the adding to our stock of luxuries and comforts, as the most important business of life. From this combination of causes it is, that too many of the public are led to measure the advantages arising from the pursuit of knowledge by a lower standard than that by which it has been measured hitherto; estimating the value of researches in science by their consequences as affecting the physical well-being of mankind, and regarding those who apply the discoveries to some practical purpose as if they were on a level with those with whom the discoveries originated. The danger to which I allude is, that the cultivators of

science might themselves be led to participate in these utilitarian views. If it should be so, science must undoubtedly descend from the high station which it at present occupies. Nor can this happen without great injury to the cause of knowledge itself." (pp. 31, 32.)

The second dialogue commences with some judicious observations on the necessity of physical power to intellectual exercise. There cannot be any doubt that a great deal of evil happens from the ignorance which men are in with regard to the amount of force which they have; that many a one foolishly concentrates into a few years the force which should rightly be diffused over a lifetime, and suffers through life for his mistake. There is truth as well as error in the popular opinion, that those who are great at college are little afterwards. Those who do not fail from the indolence born of success, often fail from the exhaustion produced by overwork. And it admits of serious question, whether the middle-class examinations which have been organised by the universities, are not doing positive injury to the young vitality of the community. As a matter of fact, they solicit a great deal of force in intellectual exercise at that very time when force is most required for physical development; nor does the forced intellectual development compensate for the physical degeneration which is undoubtedly sometimes produced. "In pueritiâ senex, in senectute puer," said Aristarchus the Sophist. It seems only reasonable to suppose, that a youth should be gaining force from without, and laying it up, under a system of proper discipline, as potential for future display, in place of expending it outwardly as he gets it, thereby starving physical development at the time, and cutting off the supply for future intellectual development. In the present series, as well as in the first series, of his 'Inquiries,' Sir B. Brodie remarks upon the "ill effect produced by the great extension of the competitive system, in stimulating many to exertions beyond their powers, and in promoting the exercise of the faculty of learning at the expense of the higher qualities of observation and thought." No authority in this matter can well carry greater weight than that of Sir Benjamin Brodie.

A little reflection will render it evident, that the important principle of the conservation of force must be applicable to human action, as well as to every other form of activity in nature. The human body cannot generate force within itself of its own mere motion, and dispense it outwardly in unlimited quantities; what is given out in any form of motion must be replaced in some way from without by an equivalent of the motion. And if a man applies his force in one direction, he has necessarily that much less for use in another way. Each one, then, may choose for himself how he will employ the force which he embodies, whether he will exercise the mind at the expense of the body, or exercise the body at the expense

of the mind; or whether, as is most just, he will endeavour to preserve that balance by which the functions of both are best developed, and man's destiny on earth best accomplished. Some may devote themselves mainly to the propagation of ideas, while others expend their energies in the propagation of children; and, as Bacon long ago remarked, those who are good at the one are not generally good at the other. It has become a common saying, indeed, that great men have great fools for children; and although a few exceptions to the rule may be collected, yet the opinion has the sanction of experience. "*Heroum filii noxæ et amentis Hippocratis filii*," said the ancient proverb. It has the sanction also of theory. For he who has used all available force in intellectual exercise, and thus displayed it to the admiration of the world in a brilliant inflorescence, has thereby exhausted the energy of the stock, which thereupon rests for awhile, in order to regain power, or decays and actually dies. So it happens, that stupidity, bodily disease, madness, or family extinction, not unfrequently follow the eminent man. He who propagates great intellectual force to his offspring, the true parent of genius, is the calm self-contained man, who has quietly done his duty in the world without noise, who, self-denying, self-reliant, has not dissipated power, but has transmitted it all to his children. And though it is often said that great men have had clever mothers, yet it is quite certain that the mother in such case has not been one who has expended her force in a literary blossoming, or in any other great intellectual achievement, but, on the contrary, one who has used great powers of mind for womanly purposes, who, with admirable self-sacrifice, has given her children the benefit of her advantages, and has thus propagated her influence through time in that way which nature seems so plainly to have pointed out as woman's duty. Does it not happen, for the most part, that great intellectual display is found to be reserved for the barren and the unmarried women? It appears also, that beneath that regulation of the Catholic Church which enforces the celibacy of priests, there is true philosophy; for therein is the recognition of the law of conservation of force as applicable to the exercise of human force.

In this second chapter, Sir B. Brodie further notices the very remarkable circumstance, that on certain occasions a conviction flashes through us that we have been in precisely the same circumstances once before; that the identical thing is happening which we felt was going to happen. We are quite familiar with the feeling; the recognition is the flash of a moment, and it almost appears as if the mind had been in advance of consciousness—had, as it were, travelled out of us, become familiar with the event, and, then returning, revealed to consciousness, at the same time, its own private experience, and the condition of things acquired through the ordinary channels of the senses. We may suppose that the former expe-

rience would then appear as the remembrance of a previous existence. Mr. Oliver Wendell Holmes has noticed the following circumstances in connexion with this duplicate consciousness. 1. The state which seems to be the repetition of a former one is often very trivial—one that might have presented itself many times. 2. The impression is very evanescent; and it is rarely, if ever, recalled by any voluntary effort, at least after any time has elapsed. 3. There is a disinclination to record the circumstances, and a sense of incapacity to reproduce the state of mind in words. 4. He has often felt that the duplicate condition had not only occurred once before, but that it was familiar, and seemed habitual. Lastly. He had had the same conviction in dreams. All that need be added to these observations is, that the state which seems to be the duplicate of a former one is not always such as might have happened before; it is sometimes certainly such as could not possibly have happened before. For example, even whilst writing a certain sentence on this page, a conviction flashed upon the writer that he had been in exactly the same position once before, which he certainly never could possibly have been. It may be doubted, too, whether the duplicate condition often is familiar, and seems habitual, if, indeed, it ever does seem to have happened more than once before.

Sir Benjamin Brodie gives the following interesting example, which, he thinks, throws great light upon the subject, by showing that, on these occasions, there is always an actual revival of some impression made on the mind formerly, though the events in connexion with it have escaped from our memory. The account is communicated to him by a "very intelligent correspondent."

"When I was about fifteen years of age, I went, with my father and mother and other friends, on a tour through Somersetshire; and having arrived at Wellington, where I had certainly never been before, we tarried an hour or two at the Squirrel Inn for refreshments. On entering the room where the rest of the party were assembled, I found myself suddenly surprised and pursued by a pack of strange, shadowy, infantile images, too vague to be called recollections, too distinct and persevering to be dismissed as phantasms. Whichever way I turned my eyes, faint and imperfect pictures of persons once familiar to my childhood, and feeble outlines of events long passed away, came crowding around me and vanishing again in rapid and fitful succession. A wild reverie of early childhood, half illusion, half reality, seized me, for which I could not possibly account; and when I attempted to fix and examine any one of the images, it fled like a phantom from my grasp, and was immediately succeeded by another equally confused and volatile. I felt assured that all this was not a mere trick of the imagination. It seemed to me rather that enfeebled memory was, by some sudden impulse, set actively at work, endeavouring to recall the forms of past realities,

long overlaid and almost lost behind the throng of subsequent events. My uneasiness was noticed by my mother; and when I had described my sensations, the whole mystery was speedily solved by the discovery that the pattern of the wall-paper in the room where we were seated was exactly similar to that of my nursery at Paddington, which I had never seen since I was between four and five years of age. I did not immediately remember the paper, but I was soon satisfied that it was indeed the medium of association through which all those ill-defined, half-faded forms had travelled up to light; my nurse and nursery events associated with that paper pattern being, after all, but very faintly pictured on the field of my remembrance."

It is obvious, however, that this is not an exact case of the condition which has been described; but rather an instance of the revival of certain indistinct infantile impressions through a particular association of ideas. Still, the explanation which Sir B. Brodie accepts is one that has been put forward to account for the genuine duplicate condition of consciousness. It is supposed by those who uphold it, that the coincidence of circumstances is partial only, and that we take this partial resemblance for identity, as we sometimes do resemblances of persons. That may happen in some cases, but in others it is certain that we have the strongest conviction that the experience is altogether strange to us, that nothing like it ever has or could have occurred before to us.

The explanation offered by Dr. Wigan, who had noticed the circumstance, was, that the two hemispheres of the brain were not quite synchronous in action; he supposed, in accordance with his theory of the duality of the mind, that the results of their action were not communicated to consciousness exactly at the same moment, so that the impression of a previous identical experience was produced. It is an ingenious explanation, but it is not generally accepted.

Still another solution of the difficulty has been offered. Some imagine, after the manner of Plato, that these flashes are really sudden recollections of a previous existence; they believe that, in the weary pilgrimage of life, we every now and then come upon precisely similar experiences to those of a former existence, the events of which, with these few exceptions, we have completely forgotten. If this be so, we are even more miserable than we had any notion of; for, from the nature of these remembered experiences, it is plain that our former life was very much of the same character as this, that sorrow and labour have been our lot through past ages, as they are through the present, and may possibly be through the future. We may possess an immortality on earth like Tithonus, and like Tithonus, without that which alone would make immortality on earth desirable.

There seems to be a great probability that the true explanation of

the problem will be found in the unconscious action of the mind. This is a subject which has been studied in Germany with the usual patient German industry, which has been sketched out by Sir W. Hamilton with his usual clearness of style, and which has been popularised by Dr. Carpenter under the barbarous designation of "unconscious cerebration;" it seems also to be included in the "reflex action" of the brain, as described by Dr. Laycock. It is a subject, however, of far too great importance to be entered upon here, where all that we need keep in mind is, first, that consciousness of mental action may exist in every degree down to actual unconsciousness; and secondly, that the most valuable part of all mental action is unconscious. If we remember these facts, and reflect also upon the very great rapidity of the mind's action, it will be conceivable how it may, in its knowledge of a particular event, anticipate the full consciousness. The consciousness lagging a little behind, or being for a moment diverted from following the mental process, will have communicated to it the result of the automatic action of the mind, which will then appear familiar, and as a previous experience. It may be objected to such an explanation that it, after all, assumes a sort of consciousness of an unconscious mental action. The objection, however, itself contains the assumption that an act of our own mind of which we have not consciousness must be quite unfamiliar to us when brought into consciousness; and it may, at any rate, be disposed of by maintaining a very partial degree of consciousness in the automatic act.

In the third dialogue, there is some repetition of what has been said in the previous two, which, as may well be supposed, in conversational discussion on such subjects, is not easily avoided. The mental faculties, although classified for convenience, are not absolutely distinct. They are really different conditions of one mind which is now in a state of feeling, now in a state of cognition, and at another time in a state of will. It is impossible, then, to discuss one so called faculty, without more or less including others; and of all undertakings, it is one of the most unprofitable to attempt to make a precise inventory of the faculties of a mind whose influence nations yet unborn may feel. There can be little doubt that the classification of the mental faculties has been productive of considerable inconvenience in mental philosophy, on account of the too great importance which has been attached to it. However carefully made, it must necessarily be imperfect, and, in so far as it makes distinctions which do not exist in nature, erroneous. "For example," as Sir B. Brodie observes, "in a system of logic the imagination is altogether disregarded; but in practice it is quite otherwise, and even the pure mathematician would find that he could make but little progress in the advancement of his science, if he did not call in the aid of his imagination."

Into the question as to necessity and free will, Sir B. Brodie is not disposed to enter farther than to make the following observations. "*First*: finding as I do the metaphysical argument to be entirely on one side, and my irresistible conviction to be entirely on the other, I am led to suspect that this is one of the subjects to which Ergates alluded formerly as being beyond the reach of our limited capacities. *Secondly*: that, even if we admit the doctrine of a necessity which rules our thoughts and actions to its full extent, the practical result is in no way different from what it would have been if we rejected it altogether. If I am not mistaken, it was the late Baron Alderson who on some occasion addressed a jury to the following effect, if not in these exact words:—'The prisoner is said to have laboured under an uncontrollable impulse to commit the crime. The answer to which is, that the law has an equally uncontrollable impulse to punish him.' We may make an allowance for the external influences which operate on men's minds; we may excuse altogether those who labour under the illusions of actual insanity; but otherwise we cannot get rid of the feeling of responsibility as regards either ourselves or others; and the most thorough-going necessarian, when he quits the loftier regions of Metaphysics to mix in the ordinary affairs of life, thinks and reasons precisely in the same way as the most unhesitating believer in free-will."

It is not impossible that Mr. Baron Alderson was quite right when he made that observation, that he was right also in laying down, as he did on the same occasion, the doctrine that, if a man had a delusion that his head was glass, he would be rightly punished if he committed murder, and his delusion had not directly driven him to do it; but it is quite certain that, when Baron Alderson expressed himself so decidedly, he assumed that a man whose relations with nature were completely perverted by disease, might and could act exactly as if those relations were undisturbed and harmonious. The decision seems to have been influenced by the philosophy which parcels out the mind into distinct faculties, and refuses to see that the whole mind works in every faculty. It is plain that the line drawn was rather arbitrary, and that there was no sufficient reason why Baron Alderson might not have further said— "The prisoner is said to have laboured under a delusion that he must kill the man. The answer to that is that the law has an equal delusion that it must hang him." Because an individual has a delusion that he must kill some one, it does not follow that he is ignorant that he will be doing wrong, in the world's opinion, if he does commit murder; but he does it because he is at law with himself, because, being mad, he thinks that he is right, and that all the world is wrong. And when a man has a delusion on one point, when, for example, he believes that he has a head of glass, he does not merely differ from

all the world on that matter, and in other things preserve his responsibility as a rational being; he is altogether mad. A young girl of only fourteen years of age, who had been mostly good and gentle, one day suddenly killed her father, opened his chest, and ate his heart. Some pronounced it to be monomania. But, as Dr. Wendt remarks, a monomania for what? For eating human flesh? It was a general madness, and to call it monomania was to justify the words of the magistrate, who said that monomanias of that kind should be cured in the Place de Grève. As disease may be of every degree of intensity in the mind, so corresponding degrees of responsibility must exist; and it is obviously impossible justly to place an arbitrary line between responsibility and irresponsibility. Although, then, it may be necessary in practice to make the separation, yet it might be as well even for judges to remember that it is only done at the cost of some injustice, and that the really just plan would be the seemingly impracticable one of proportioning the punishment to the degree of responsibility which actually existed.

It is a common mistake, which even Sir B. Brodie seems to have fallen into, to suppose that the necessarian doctrine is fatalism. The true necessarian does not deny the existence of responsibility any more than the free-will metaphysician. He simply applies the law of causality to human actions, maintaining that the will, like everything else in nature, must have a cause. He affirms that he can as easily conceive creation to have happened without a cause as conceive volition to be without antecedent. Admitting this, it does not thence follow that an individual is under a fatal necessity to act in a certain way; what does really follow is, that given a certain antecedent state of mind a certain volitional effect will follow, if no other state of mind meanwhile intervene to counteract it. Very great confusion has been caused in this matter by the use of the word necessity—a word which is usually supposed to denote an irresistible force, a cause which cannot be counteracted; whereas it is here used only to express an uniformity of sequence. Because it is possible for A, with an intimate knowledge of the character of his friend B, and of the particular circumstances in which he is placed, to predict nearly with certainty how he will act in them, B is none the less free to act as he likes. The experience of A is, that certain causes operating in B will produce certain effects, but it is quite possible that the operation of those causes may be interfered with by the intervention of other causes which will produce a different effect, and disappoint the prediction. But it cannot thence be concluded that the law of causality is not applicable to the human will; all that can be said is, that A was not acquainted with all the antecedent conditions. A thief, again, may have so strong a motive to jump from the top of a house, in the desire to escape from his pursuers, as to determine his will to the act; or the desire to save his life from

an apparently certain destruction may intervene, and supply a stronger motive to prevent the leap. All that the philosophical necessarian maintains is, that the first motive determines a certain volitional consequent, unless a counteracting cause intervene meanwhile and determine a different result. But the result, whatever it be, has necessarily its antecedent cause. This, it must be admitted, is a very different kind of necessity from that which we speak of when we say that given a certain cause, for example, deprivation of air to a man, a certain effect, death, *must* follow, whatever be done to prevent it.

In all the world, says the necessitarian, there is not a casualty ; for nowhere in it is there not causality. It must be evident on reflection what a mighty responsibility this doctrine imposes upon the individual. Life is seen to be a most important work of art, to be built up under a recognition of the principle of cause and effect. The individual sees the way by which he may influence the formation of his own character and attain to the possession of a strong will by its logical development through reason. He knows that certain antecedents must determine certain consequents, and endeavours to operate upon the antecedents ; he fashions in some measure the circumstances which fashion him. "All successful men," says Emerson, "have agreed in one thing—they were *causationists*. They believed that things went not by luck, but by law ; that there was not a weak or cracked link in the chain that joins the first and last of things. The most valiant men are the best believers in the tension of the laws." If the will determined itself, if it were determined by no antecedents, it is impossible to conceive how a man should have any power over it, any way of influencing it, and, therefore, any responsibility ; whereas, in reality, the education of the will is the highest aim and attainment of human effort, and a completely fashioned will the last and best development of nature, the finest flower of all her marvellous works. "Sir," said Dr. Johnson to Boswell, "we know our will is free, and there's an end of it." But the ponderous doctor had rather an arbitrary way of settling matters, which was sometimes not so satisfactory to his hearers as to himself. He fancied that he had demolished Berkeley by demanding triumphantly why the Bishop did not strike his foot against a stone, and thus convince himself of the existence of an external world ; and he would probably have become exceedingly angry if some one had told him that he had not said anything whatever to the point, as in truth he had not. Still, in asserting free-will against fatalism, there cannot be any doubt that Dr. Johnson was right. It is the fatalist who has done so much mischief by so completely misunderstanding his own position. He has not seen that the application of the law of causality throughout every part of nature is not incompatible with individual freedom of choice. On psychological grounds, it has been

above shown that the volition must have its necessary antecedent ; and on physiological grounds, it may be said that the great principle of conservation of force demands it. The controversy about free-will and necessity is now generally acknowledged to be a useless wrangle about improperly applied words ; and while Locke clearly pointed out how absurd and inappropriate it was to use the word free in connection with the will, Mr. J. S. Mill has done a like good service to the equally misused word necessity.

It is time to return to our discursive philosophers. Passing, then, as abruptly as they do, from subject to subject, it will be interesting to give Sir B. Brodie's opinion on the use of tobacco and opium.

"*First.*—It is not simply as a liquor producing absolute intoxication that alcohol may be injurious. One person may drink a pint of port wine or an equivalent quantity of some other liquor daily, and that through a long life, with impunity ; while in the case of another, though never in a state of intoxication, the effect may be to render him dull in early life, prematurely stupid in his old age, and probably shorten his life ultimately.

"*Secondly.*—The evils arising from the use of alcohol have been fearfully aggravated by the invention of distillation. It is under the influence of gin and brandy, much more than of beer or wine, that bodily diseases arise, and it is alcohol in these forms especially that leads to acts of violence and crime.

"*Mutatis mutandis*, what I have said as to the use of alcohol may be applied to other articles of the same class, such as opium and tobacco. The opium-taker is only negatively mischievous to society ; he is dreamy and inactive, but nothing more ; and it is worthy of note that the habitual use of opium does not, like that of alcohol, seem materially to shorten the duration of life. So as to tobacco. In the Polytechnic School of Paris it was found that the habitual tobacco-smokers were far below others in the competitive examinations. Tobacco-smokers, like opium-takers, become lazy and stupid, but they have not the vices of gin-drinkers. As to the effect of tobacco upon the organization generally, I am inclined to think that it is more deleterious than opium, and more productive of disease, when the use of it is carried to excess."

It is rather a bold statement that tobacco-smokers become lazy and stupid, considering how many of our most active men are great smokers. And certainly it would be as fair to suppose that those who were low down in the competitive examination in the Polytechnic School of Paris were habitual tobacco-smokers because they were lazy and stupid, as it is to suppose that they were lazy and stupid because they were habitual tobacco-smokers. Is it not wise for an individual to create for himself as many gratifications as possible, so long as he does not injure his health by excess ? Or is it true philosophy for him to diminish his wants, and, disdaining luxuries,

to revert to a Spartan simplicity, and to his ancestral sheepskin apparel? To Eubulus, who in the fourth dialogue asks, "What is happiness?" Crites replies—"I consider him to have the greatest amount of happiness who has the largest proportion of agreeable, and the smallest proportion of painful feelings, be they either physical or moral." While giving this definition, he fears it is common-place and vulgar; but Eubulus reassures him by pronouncing it the most philosophical sense in which the word can be used! Will it not, then, justify a moderate use of tobacco, or the judicious indulgence of any sensual pleasure? If a man create for himself as many artificial wants as possible, so long as he has the means of gratifying them, he will plainly be increasing his happiness; besides which, the desire to possess the means of indulgence will stimulate him to active exertion, which will again be a pleasure.

It is an odd circumstance that the theologians, moralists, and philosophers, who have undertaken to instruct mankind in the way to become happy, have almost always confined themselves to the moral aspect of the question. They do not tell us how to act with regard to physical enjoyments, nor do they point out how a just and equable frame of mind may charm away physical pain. And yet, what profit is it to demonstrate that to be virtuous is to be happy to an unfortunate creature who is constantly suffering the great agonies of some painful organic disease? If a man can find his happiness in enduring suffering with patient resignation, then he may ensure to himself a never-failing supply; otherwise, happiness will be to him, whilst "confined and pestered in this pinfold here," little more than a devout imagination. Judging from appearances, those who least deserve happiness often seem to get the most of it. The wicked, on the whole, stands very well in slippery places, and we may pass many times by his garden and not find it a desolation. It is very consoling, however, to learn that Sir B. Brodie's long experience has led him to the conviction that the selfish people who live only for their own gratification, without regard to the feelings of others, do not, when they get prosperity, get happiness. He says:—"But I have lived long enough to watch the course of some such persons, and am led to believe that even in this world the day of retribution rarely fails to come at last. I have seen them, as they advanced in years, fall into a state of melancholy, amounting to hypochondriasis, for which even the most firm religious convictions afforded but an inadequate relief. A philosophical friend of mine has suggested that remorse is the destined punishment in a future state of existence. Be that as it may, I am satisfied that many, who do not own it, even to their nearest friends, are the victims of remorse even here on earth. Obvious examples of it in one of its forms are almost constantly presented to us in the daily journals, in the notices furnished by the Chancellor of the Exchequer of sums of

money sent to him anonymously for 'unpaid taxes.' Is there any one, even of the best among us, who does not look back with regret at some errors which he has committed at a former, and perhaps distant, period of life?"

It seems universally admitted, although the practice in this matter is quite at variance with theory, that whosoever devotes himself entirely to getting money, who is inspired with that desire only, commits a certain mistake, and does not get the happiness which he hopes for. The wealth-passion is plainly a blighting passion, which always endangers, and often kills, the moral sense. Nor are its evil effects confined to the individual. The community is tainted by the subtle and powerful poison; commercial morality becomes of a different species from true morality, in reality no morality at all, but immorality under the flimsiest disguise; and the general plan of estimating an individual by a money value ignores with a remarkable audacity, yet not with impunity, the genuine worth and native dignity of humanity. Constituted as every one is with a moral nature, it is impossible that any man can cut himself so completely off from his fellows as to live solely for himself, in utter indifference to their welfare, without being severely judged of nature; and he who takes that course is very diligently sowing curses, the fruits of which his posterity will most likely be compelled to reap. For, though the individual may forget his relations as a moral being, the universe does not forget. The wealth which has been hoarded up with such careful toil, not with any design of using the immense power which it represents for the good of mankind, but simply for its own sake, or with the ambitious vanity of founding a family, is often seen to become, after a little while, nothing more than the gilding of decay. The family that was to be founded upon it has, by the very means taken to accumulate it, been tainted with a rottenness at the heart. For the parent who has systematically repressed the moral element in his nature and done his best to destroy it, even though he himself escape the bitter consequences of his error, transmits his acquired deficiency to his children, who may thus be born with a natural vice of constitution to which, but for the most favorable circumstances, they must fall victims. How rare, indeed, is it to find wealth-founded families endure through two or three generations!

It would scarcely be doing justice to Sir Benjamin Brodie if we did not here signalise a danger which he fears from the increase in the population of towns, and the diminution of that of the rural districts. This also may be attributed to the eagerness after wealth. Our crowded cities are draining off the stock of vitality that has been hitherto stored up in the rural districts, and are using it all up in the eager competition. What, then, is to become of the race when the supply is exhausted?

“Unfortunately, it is shown by the returns under the late census, that while there is a great increase going on in the population of the larger towns, the population of the rural districts is diminished rather than otherwise. I own that I cannot contemplate such facts as these without some apprehensions as to the future. There may not be any great difference observable in the course of a single generation; but is there not danger that, after a few more generations have passed away, the race will degenerate, and that the mass of the population will no longer be distinguished for those powers of physical exertion, and that unflinching determination to overcome difficulties, which have hitherto contributed so much to the power and welfare of our country?”

If such apprehensions are ever realised, few will then doubt that a wealthy country may gain its wealth at far too great a cost.

It has, fortunately, happened so far in the world's history, that whenever men have come to set up a purely artificial faith, to believe in shams as realities, some reformer has appeared who, bursting through formulas, has shattered the spurious conventionalisms, and has proclaimed with a force that there was no withstanding the inherent dignity of humanity. And when the impassioned eloquence of earnest conviction utters the simple truth that “a man's a man for a' that,” it is remarkable how quickly formulas fall to the dust and the glitter of false glories fades. There is some reason to hope for a reformation in the faith of the present age. For there is noticeable abroad an impatient spirit which rebels against the money-worship and other idols; on all sides are heard complaints of the evils which flow from the mad desire for wealth, of the immorality which is being received without anger into commercial transactions, of the hypocrisy which is so gladly welcomed in social life, and of the great separation of the different classes from each other. The separation, says Sir B. Brodie, “to such an extent as it exists in this country at the present day, is a great social evil, while I fear that it may lead to a still greater evil, perhaps at no very distant period of time.” Seeing, however, that the evil is distinctly recognised, and by many strongly reprobated, there is some hope that the threatened danger may be in some measure obviated.

If it be the fact, as many suppose, that the separation of the different classes has not its foundation in any real human superiority on the part of those who hold the higher position, it is certainly a fact of grave importance, which cannot but add seriously to the danger of such a state of affairs. The upper classes have all the advantages of a complete and expensive education, but in how few instances, it is asked, do these excellent opportunities bear good fruit? With nothing more to boast of than an outward appearance of refinement, with no worthy object in life, those who are born to affluence often, as Crites observes, “betake themselves to mean and frivolous, and

too frequently to degrading and demoralising, pursuits." Ergates wishes that he could dispute the correctness of the observation, but confesses that he cannot. Now, it is very certain that he who wastes a life in enervating pleasures and in trivial pursuits, who passes away without the world being any better for his existence, is, whatever position he may have held in the world's ranks, much less noble a man than the humblest mechanic who labours honorably in his vocation. All honest labour is so much added to the wealth of humanity; while the physical forces of nature might well rejoice, if they were capable of it, at the miserable drone who allows them to get back, in so easy a way, that force which has been gained from them, at so great a cost, by the labour of the thinking and working men. It scarcely needs a prophet's insight to predict what must be the inevitable result of a condition of things in which superiority really means inferiority. As Sir B. Brodie justly observes,—“If the superior classes allow themselves to be distanced in the race, they will find ere long that they are in danger of losing the position which they occupy, with all the advantages belonging to it. Money is power, which is certainly none the less from it being combined with the *prestige* of birth and rank; but knowledge and intelligence are a greater power still, and if the two should unfortunately be placed in opposition to each other, there can be, as I apprehend, not the smallest doubt as to which of them must ultimately prevail.”

In the sixth dialogue, our rambling philosophers, after agreeing that there was a time when neither vegetable nor animal life existed on the earth, and that the first introduction of life must have been by some special act of creative power, enter into a short discussion on the fashionable question of the origin of species. It may, perhaps, be justly said that it is not an advantage to any scientific question when it becomes fashionable. There is a danger, then, that our great philosophers may lose their calm indifference to all but truth, and be influenced by the passions and prejudices which surge in the vulgar breast. Unhappily, the pursuit of science is no safeguard against human weaknesses; and few people seem to have so little of the ‘milk of human kindness’ as the scientific men. “There is an avarice of reputation as there is of money; and the competitors have not always been so liberal to each other as they might have been well expected to be.” Injurious, however, as the angry discussions on the origin of species may in some measure have been, one good thing has resulted from them—one fact has been added to anatomical science. The monkey has, without question, a posterior lobe to its brain, and is nearer to man by the extent of that quantity of nervous substance. But although it is undoubtedly well that this point has been settled, yet it must be admitted that the solution of it has not brought us appreciably nearer to a conclusion on the vexed question of the origin of species. Sir Benjamin Brodie thus temperately expresses himself

upon the subject :—"The theory of the gradual development of the multitudes of living beings from one primitive germ, as first propounded by the elder Darwin, and afterwards by Lamarck and the author of the 'Vestiges of the Creation,' has been not unfrequently viewed with suspicion, as if it had a tendency to atheism. Yet there can be no greater mistake. Trace back this system to its origin, and you find that it takes for granted as marvellous an act of creative power and wisdom as can possibly be conceived. In saying this, however, you must not suppose that I am advocating the hypothesis in question ; for really, notwithstanding all that has been said on the subject by the learned and sagacious author of the 'Origin of Species,' I find so many difficulties in the way, that I am very far from being convinced of its truth ; and I think there is no one who will not find a great stretch of the imagination necessary to enable him to conceive that an oyster, a butterfly, a viper, and an elephant are all derived from one common stock, and are but different forms of one original element variously developed."

Though the conception of such a marvellous transformation is certainly not easily made, it must not be supposed that the difficulty of conceiving it affords any argument against the possibility of it. It is obvious that special creative acts are just as little conceivable by us ; and experience has shown that things which at one time were utterly inconceivable, have become, not only conceivable, but so plain to comprehension as to make it a matter of wonder that they were ever doubted. If all the varieties of the human race have had a common origin, it is evident that considerable modifications have been effected by time and circumstances even in the most exalted of living creatures. Sir B. Brodie even supposes it possible that, if two families of Albinos were placed on an island and left there to intermarry, they might in time breed a distinct race of Albinos, as there is now of negroes. That is not very probable, however, seeing that Albinism is by most authors considered to be a congenital defect of the organism, and that experience proves that nature does not willingly propagate such imperfections. As Albinos are generally delicate, and do not live long ; as they have feeble vision, and are partially deaf ; and as they are generally semi-idiotic, there is strong presumption in favour of the correctness of the statement made by many authors as to their unfruitfulness. And although one or two examples have been with great labour collected by Dr. Lucas in which Albinos did breed, yet the investigations of Dr. Bemiss into the results of marriages of consanguinity would seem to prove that the most successful plan of producing Albinos would be that which produces degeneration of the race, namely, the intermarrying of near relatives.

One very essential and important fact in connexion with his theory Sir B. Brodie charges Mr. Darwin with having overlooked :—"Mr. Darwin has well illustrated the subject by his experiments on pigeons ;

yet he has overlooked one very essential and important fact. The transformations to which I have alluded are confined to the external form, to the limbs, to the skin and its appendages. There are bandy-legged sheep; cattle with short horns, or no horns at all; dogs with long legs and slim bodies, dogs with short legs, big dogs and little dogs; Albino rabbits and dark-coloured rabbits; and so on. The Dorking fowl has an additional claw; and in one instance only, quoted by Mr. Darwin, there was an additional bone in the spine of the pigeon. But these transformations do not extend to the internal and more important vital organs, nor to the muscles and nerves, nor even to the general form of the skeleton. The negro is distinguished by his woolly hair, by his projecting jaws, the shape of his legs and heel; yet it matters not to the student of anatomy whether the subject of his dissection be a negro or an European. Those organs which are the special objects of his study, the viscera of the chest and abdomen, the brain and nerves, and, I may add, the muscles, are similar in both." We fear that, in these observations, Sir B. Brodie has scarcely done Mr. Darwin justice, and has certainly done himself some injustice. It is undoubtedly a matter of great moment to the student whether he dissect the brain of a negro or of an European, if he wishes to gain an accurate knowledge of the important organ. If he determines to ignore altogether the number and disposition of the convolutions, and the size and shape of the hemispheres, if he means deliberately to neglect the investigations of Tiedemann, Gratiolet, and others, he may contentedly go on with his dissection on any human brain, and he will find a cerebellum, a corpus striatum, an optic thalamus, and other such parts, as well in the negro as in the European brain. He may find all these, too, in the monkey. But if, impressed with the opinion that co-ordinately with an extension of the mental faculties, there is an extension and complication of the brain, he studies the anatomy of the brain with the object of learning whether the intellectual differences between the negro and European are attended or not with differences in the extent and complication of the nervous substance, he will find that they are. He will see that it is not correct to say, as Sir B. Brodie unwittingly says, that the "brain is the same (similar) in both instances; in fact, the only real difference, and that a comparatively small one, is in the form of the skeleton, in the skin and its appendages."

Although information is very much wanted on the extent of variation in the brain among the different races of mankind, yet there is some knowledge to be had upon the subject. "I am well aware," says Huxley, "that it is the fashion to say that the brains of all races of mankind are alike; but in this, as in other cases, fashion is not quite at one with fact." Tiedemann, who, as the negro's advocate, makes the least of any differences, says:

"The only similarity between the brain of the negro and that of

the orang outang is, that the gyri and sulci on both hemispheres are more symmetrical than in the brain of the European."

Professor Huxley adds, that the fact must strike every one conversant with the ordinary appearance of an European brain, who glances at the plate in Tiedemann's memoir.

Gratiolet has figured and described the brain of the celebrated "Hottentot Venus," and his remarks are as follows:

"The woman, be it premised, was no idiot. Nevertheless, it may be observed, that the convolutions of her brain are relatively very little complicated. But what strikes one at once, is the simplicity, the regular arrangement of the two convolutions which compose the superior stage of the frontal lobe. These folds, if those of the two hemispheres be compared, present, as we have already pointed out, an almost perfect symmetry, such as is never exhibited by normal brains of the Caucasian race. This regularity, this symmetry, involuntarily recall the regularity and symmetry of the cerebral convolutions in the lower species of animals. There is, in this respect, between the brain of a white man and that of this Bosjes-woman a difference such that it cannot be mistaken; and if it be constant, as there is every reason to suppose it is, it constitutes one of the most interesting facts which have yet been noted."

After mentioning other differences, Gratiolet adds:

"The brain of this Hottentot Venus is, then, in all respects, inferior to that of white men arrived at the normal term of their development. It can be compared only with the brain of a white who is idiotic from an arrest of cerebral development."

With respect to the shape of the hemispheres, Tiedemann observes of the negro's brain: "The anterior part of the hemispheres is something narrower than is usually the case in Europeans."

The importance of the subject, and the misstatements made with regard to it, must be our excuse for one quotation more. Professor Huxley concludes:

"Thus, the cerebral hemispheres of the Bosjesman (and, to a certain extent, of the negro), as far as the evidence before us goes, are different from those of the white man; and the circumstances in which they differ—viz., the more pointed shape of the cerebral hemispheres, the greater symmetry of their convolutions, and the different development of certain of these convolutions—are all of the same nature as most of those which distinguish the ape's brain from that of man. In other words, if we place A, the European brain, B, the Bosjesman brain, and C, the ourang brain, in a series, the difference between A and B, so far as they have been ascertained, are of the same nature as the chief of those between B and C." (No. I, 'Natural History Review.')

It is plain, then, that so far as the structure of the most important internal organ in man is concerned, it is rather in favour of Mr.

Darwin's theory than otherwise. Even Sir B. Brodie must admit this, if he wishes to be consistent. For he acknowledges that, "co-ordinately with an extension of the mental and intellectual faculties, there is an extension and greater complication of the nervous system, especially of that part which we call the brain." He admits, also, the inferior mental capacity of the negroes and other varieties of mankind. How then, does, he reconcile these statements with his previous assertion that the brain is the same in a negro and in an European? If, again, as he supposes, the negroes and other inferior races may, by the influence of favorable circumstances through generations, improve, so as "even, perhaps, to approach the point which has been attained by the more civilized communities of the present day," does it not follow from the previous statements that the brain must undergo considerable modification? The difference which at present really does exist in favour of the Caucasian brain, will represent the extent to which the negro's brain may improve.

It would not, however, be fairly representing Sir B. Brodie, if the foregoing remarks should produce an impression that he had come to any conclusion on the subject of the origin of species—"You may conclude no more than this: that the thing is so far beyond the limits of my experience, and that, in whatever way I look at it, I find the question so beset with difficulties, that I cannot venture to form any opinion on the subject."

While admitting the co-ordinate development of mind and brain, Sir B. Brodie refuses distinctly to accept the doctrine that the former is simply a function of the latter. "We have no more right," he observes, "to say that the brain makes the mind, than that the mind makes the brain." And to those who may object that we have no experience of the existence of mind except in combination with material structures, he gives the answer "so briefly and clearly given by the learned author of the '*Physical History of Mankind.*'" Dr. Prichard's words are:

"The whole universe displays the most striking proofs of the existence and operation of intellect, or mind, in a state separate from organization, and under conditions which preclude all reference to organization. There is, therefore, at least one being or substance of that nature which we call mind separate from organized body, not only somewhere, but everywhere."

Sir B. Brodie thinks it very remarkable that this argument should have been "so much overlooked as it has been both by physiologists and metaphysicians;" and takes the opportunity to point out the errors which they have both fallen into in their investigations. The physiologist's mistake is, that he has studied the brain as he would any other organ of the body, and has thus tended to reduce the mind to a mere function of it, as the secretion of bile is a function of the liver. "We conclude with equal certainty," said Cabanis, "that

the brain digests in some way its impressions, and accomplishes organically the secretion of thought." The metaphysician has gone into the other extreme, and has studied mind quite irrespectively of the corporeal system. Bishop Berkeley is usually said—but the assertion does not do justice to his philosophy—to have denied altogether the existence of a material world. "Neither of these, as I apprehend, pursues exactly the right course. The human mind, as it comes under our observation, is to so great an extent influenced by the condition of the body, that it cannot be the proper object of study if the latter be disregarded; while the physiologist is equally wrong in regarding the mind simply as a function of the brain, overlooking the entire want of relationship between the phenomena which the mind exhibits and those presented by the material world."

It is not exactly apparent, nevertheless, how this last statement of an "entire want of relationship between the phenomena which the mind exhibits and those presented by the material world," is reconcilable with the above mentioned "briefly and clearly given" argument of Dr. Prichard.

Sir Benjamin Brodie accepts the logical result of the views which he has enunciated with regard to mind and brain. He admits that the mental principle in the lower animals must also be independent of organization, and believes it not improbable that the future which man claims for himself will not be denied to them. It is plain that man has no just reason for claiming "a sole exclusive heaven," and when, after a well-spent life, he passes into happier spheres, he may even expect that "his faithful dog shall bear him company."

No limits can be put to the extraordinary conceit which man has of himself. With a remarkable placidity he rests in the belief that the forces of nature have been at work through countless ages for the purpose of building him a dwelling-place; that nature has tried her "prentice hand" in the construction of numberless organic forms, in order to attain to the skill of accomplishing the perfection of his type; and that now, having completed her work and witnessed the glory of it, nature will rest from her long labours and thankfully utter a "Nunc dimittis." For he at last has come for whom there has been such mighty travail. But is this probable? Is man really the final blossom of the universe? As Sir Benjamin Brodie asks, "Whatever may be the future destiny of man, is he really so perfect that he should be regarded as the crowning-piece of the creation? We have the history of the former inhabitants of our planet, not handed down by tradition, not written in books, but recorded in indelible characters in the strata immediately below the surface of the earth. We learn from these that numerous forms of animal life existed, in ages which have long since gone by, which have now become extinct; that the first of these which were called into existence were of a simpler kind; and that by a gradual, though

by no means regular progression, these have been succeeded by others of a higher and yet higher order. Is man to be considered as the last of these productions? or is it not more probable that he does but stand in the middle of a long series, and that in the far distant future there may be a time when, his mission on earth having been completed, he too will be replaced by other living beings, far superior to him in all the higher qualities with which he is endowed, and holding a still more exalted place in the system of the universe?"

Such speculations may be vain, but they are the result of a principle in the human mind which impels it unceasingly to labour to push back the boundaries of the unknown, and by which it is made in time to know the limits of its faculties.

In taking leave of these '*Psychological Inquiries*,' it may be well to add that, in books written in the form of dialogue, it is often difficult to avoid attributing to the author sentiments which may, after all, not be his, but those of one of his characters. If such an injustice has been done to Sir B. Brodie in the present notice, the blame of it must rest chiefly with himself. For his "*personæ dramatis*" are the merest shadows; they have no individuality; Crites might be Eubulus, and Eubulus might be Ergates, and no one would find any difference. If one of them had begun at the beginning of the book, and had talked on to the end of it, while the others listened, it would be no clearer than it is now that it is Sir B. Brodie who is talking throughout. Many, perhaps, might have been more pleased if Eubulus, instead of inviting his friends from town, had sat down and entered more deeply in some of the many interesting subjects which, as it is, he has only touched upon, being prevented, whenever he was tempted to do so, by the observations of his friends that such matters were beyond the reach of human faculties.

He must, however, be a lover of carping criticism who does not at the end of the book feel grateful to the author for such a clear, temperate, and careful expression of opinion on subjects that are of the deepest interest to all mankind.

H. M.

On the Principles and Method of a Practical Science of Mind, in Reply to Dr. THOMAS LAYCOCK, Professor of Medicine in the University of Edinburgh. By J. STEVENSON BUSHNAN, M.D.; Fellow of the Royal College of Physicians of Edinburgh; late Senior Physician to the Metropolitan Free Hospital; Resident Proprietor of Laverstock House Asylum, near Salisbury.

THE more we study Dr. Laycock's elaborate work, 'Mind and Brain,' and his subsequent relative publications, the more we are satisfied of the large turn of his mind for psychological investigation, of the depth of his attainments in that department, and of the profundity of his views; nevertheless, we still retain our opinion that he has failed to make his works practical in the ordinary sense of that term. We never said that his views are not susceptible of being rendered practical. What we insist upon is, that he has not yet succeeded in what he proclaims on every occasion to be his great object—namely, to render a study which has been hitherto abstruse and unintelligible, easily accessible by people of a practical turn of mind; or at least to make that study more available for practical use than it was in the hands of the older psychologists.

It appears Dr. Laycock accepts our definition as to what a practical mental science includes—the following being our words:—"What are practical metaphysics? What but a knowledge of the ordinary faculties of the mind, of the general laws under which these faculties operate, and of the modifications which these laws are apt to undergo in individuals; what but a knowledge of the appetites, desires, benevolent and malevolent affections of our human nature, of self-love, of moral judgment and obligation, and of the circumstances under which these are exalted, confirmed, or subverted?" This definition Dr. Laycock accepts, with the stipulation that he admits of no limitations. Let it be so. What we still affirm is, that it is hardly possible for a student previously unacquainted with psychology, to obtain from Dr. Laycock's writings the knowledge included in the above definition, so as to make use of it in his intercourse with the world.

Dr. Laycock will surely understand when we say this, that we say it of his book or books, sent into the world without an interpreter to teach the still uninitiated practical psychology. We never did say, and do not intend to say, that 'The Mind and Brain,' used as a text-book for a course of lectures, while each particular part to be studied first, next, and so on in succession, is pointed out, while a commentary on the signification of the several propositions contained

in each is premised, and a glossary is given of the particular sense in which such and such words are to be received, will not prove a most useful work for instruction even in practical psychology. For example, if a student were advised to omit the first 115 pages of the first volume of 'Mind and Brain,' and begin his reading at the second part, we think, if he had studied psychology, and had endeavoured to understand some such book on psychology, as 'Morell's Elements' of that subject, he might really learn some views of surprising interest and utility from several successive chapters of Dr. Laycock's 'Mind and Brain.' But it may be remarked that, in these chapters, while he is desirous to show how much he differs from some of the older metaphysicians, he finds Sir Wm. Hamilton, avowedly a psychologist of the old school, continually coinciding with him in his views. Whence we infer, as we did before, that Dr. Laycock should not contrast his doctrines with the obsolete doctrines of what, for brevity's sake, we shall call the psychology of the schools, but compare them only with the most recent views given in the schools, such as Sir Wm. Hamilton so copiously supplies. For example, we think he would render his pupil a great service, in the very beginning of his psychological studies, if, directing him at once to page 116 of volume first, he were to comment on the words, "A human being intuitively distinguishes himself from all other things around him and not of him, which to him constitute the external world. And just as he intuitively distinguishes the external world from himself, so he separates that part of himself which feels internally, as a subject from that part of himself which he perceives externally in space—as an object. * * * * To him, that which sees, touches, and causes motion, is one thing; that which is seen, touched, and moved, is another. The one is the agent, the other is the object." The service he would do the pupil here is the inestimable benefit of saving him from interminable discussions as to the insufficiency or validity of the proofs of the existence of an external world. But his immediate quotation from Sir Wm. Hamilton shows that Dr. Laycock's new system is not singular in affording this advantage. "The veracity of consciousness in the fact of perception [*i. e.* the accuracy of our intuitive knowledge of our existence] being unconditionally acknowledged, we have established at once, without hypothesis or demonstration, the reality of mind and the reality of matter; while no concession is yielded to the sceptic, through which he may subvert philosophy in manifesting its self-contradiction."

We said that Dr. Laycock's student must be provided with a glossary, showing the particular sense in which he employs words of common use in psychological discussions. In the passage quoted above, there is a word which we gave in our last critique as one of those with which Dr. Laycock confuses his readers. The word we refer to is "intuitive." We took occasion to examine at some length our

author's section, entitled intuitive ideas and necessary truths, inferring from the frequent use of important words under that head that his book, as it stands, so far from giving an easy introduction to this difficult and important inquiry, did nothing but confuse the reader.

Dr. Laycock has complained that we have selected some of the speculative questions in philosophy, in order to test his system, instead of choosing our themes from the practical questions which are largely discussed in his work. We have bestowed praise on much of Dr. Laycock's system; but we have seen great reason to object to his frequent change of the established signification of words in general use, and it is this principal fault to which we must still, in a great measure, confine ourselves. For it so happens that the change in the use of such words is chiefly to be discovered in the discussion of the most speculative questions, though the vitiating influence of the changes themselves extends even to perverting the sense of subjects which might seem incapable of being misunderstood. Who could suspect that, in a work designed to render an abstruse subject familiar to ordinary readers, words so well established in signification as "intuition and experience" should have been made use of in a sense totally opposite to that in which they are universally received? Nor is this change to be imputed to any haste or inadvertence; but it is a fixed design, and part of the plan of Dr. Laycock's system, as it stands, so to employ these words. He has not replied to our objections to his section entitled "Definition of Instinctive Ideas and Necessary Truths;" but he has given us a new discourse, the title of which is "The Nature and Origin of Experience practically discussed," wherein the full extent of his offending against the legitimate use of psychological language is freely set forth.

Our original objection, which has led to this controversy, was, that Dr. Laycock had, in a work professing to make psychology easy and of practical use, changed the signification of such important words as "necessary and intuitive," so as totally to confuse the minds of his readers. Dr. Laycock does not deny that he has changed the signification of these two all-important words, the effect of which is to render every other psychological work a shut volume to those who have been initiated in psychology under his auspices. Dr. Laycock's system destroys the important distinction between such truths as that the square of the hypotenuse is equal to the sum of the squares of the base and perpendicular in a right-angled triangle, and such truths as that water boils at 212° Fah.; yet the former truth is universal; the same in the mind of the Creator as at every point of the universe; whereas the latter greatly varies, not only on the surface of every planet, but even at many inhabited spots on the surface of the earth; for example, in the South American city of Quito, where water boils at a much lower temperature than 212° F.

But we doubt if Dr. Laycock has always been careful to use the

words "intuitive and necessary" in the new sense which he has affixed to them.

For example, he tells us (at p. 290, vol. i), that "All truths whatever must be truths of experience; for consciousness itself is but an experience of the vital changes within us." Again, in his reply to our observations (No. XI, January, 1862, p. 510), he says:—"Now, the fundamental proposition with me, as to all our knowledge, is that consciousness itself is experience—an experience of the vital changes in or by which we feel, think, and know. Here is a plain, distinct general law, applicable to all modes of feeling, thought, and knowledge." Nobody denies that, in a certain sense, all consciousness is experience. But is that the established sense of experience, when contrasted with intuition? And if it be not, Dr. Laycock has, in the first place, chosen in his practical work to change the sense of a word in universal use to denote a different idea—one of the charges we made against him. But if that be the sense he attaches to experience, will he explain to us what idea he affixes to the word *intuitively* in the passage before quoted—"a human being intuitively distinguishes himself from all other things around him, and not of him, which to him constitute the external world." Why does Dr. Laycock here use the word intuitively apparently in the sense appropriated to that word by psychologists in general? whereas the proper phrase, according to his system, should be by experience; for intuitively implies consciousness, and, according to him, all consciousness is experience.

Again, Dr. Laycock imputes it as a fault to psychologists that they employ the words intuitive and intuition in the same sense as intuitive truths and truth; hence, too, it does not follow according to his view, that man's belief in the external is a truth, unless he here use the word intuitively in a signification different from that which he assigns to it.

We entreat Dr. Laycock to reconsider this matter. If he is to become an authority in psychology, of which we entertain no doubt, he is, we assure him, introducing one new source of misunderstanding and confusion into the study of psychology, in addition to the many such blots by which it is already defaced. We recommend to him the study of a page or two in Sir William Hamilton's 'Lectures' (vol. iv, 72, 73), under the head "Intuition," from which we take the following extract:—"The only part that might have required an explanation is the distinction of truth into pure or *à priori*, and into empirical or *à posteriori*. Experience presents us only individual objects, and as these individual objects might, or might not, have come within our sphere of observation, our whole knowledge of and from these objects, might or might not exist; it is merely accidental or contingent. But, as our knowledge of individual objects affords the possibility, as supplying the whole contents of our

generalised or abstracted notions, our generalised or abstracted notions are consequently not more necessary to thought, than the particular observations out of which they are constructed. For example, every horse I have seen, I might not have seen; and I feel no more necessity to think the reality of a horse than the reality of a hippogriff; I can therefore easily annihilate in thought the existence of the whole species. I can suppose it not to be—not to have been. The case is the same with every other notion which is mediately or immediately the datum of observation. We can think away each and every part of the knowledge we have derived from experience; our whole empirical knowledge is therefore a merely accidental possession of the mind."

"But there are notions in the mind of a very different character; notions which we cannot but think, if we think at all. These, therefore, are notions necessary to the mind; and, as necessary, they cannot be the product of experience. For example, I perceive something to begin to be. I feel no necessity to think that this thing must be at all, but thinking it existent, I cannot but think that it has a cause. The notion or rather the judgment of cause and effect is therefore necessary to the mind. If so, it cannot be derived from experience."

If Dr. Laycock will apply his mind to this subject, we feel assured he will discover that the belief in the existence of the external world is not a truth of experience. Dr. Laycock probably sometimes dreams that he is still at York; he perhaps thinks himself dining at some old friend's table with the Minster from the window brought vividly out in the summer evening's sun. This dream is as much the experience of a succession of states of consciousness as the reality it represents would have been. But the dream is beyond doubt a part of self. There is nothing, therefore, contradictory in the notion of the idealists that all the mental phenomena in a man's mind throughout life are purely internal phenomena, or a part of self, like those of a dream. How, then, does Dr. Laycock get over this difficulty, if he regards all truths as truths of experience? There is the dilemma. It cannot be got over on his principles. He must confess that intuitive truth is something more than experience teaches. If he does not confess that an intuitive truth is a truth felt to be a truth by the original constitution of the human mind in an act of experience, it is true, but independently of what that act of experience teaches. The appearance of York Minster is equally an experience of consciousness in Dr. Laycock's waking hours as in his dreams; but the perception of its being a thing external to his mind as a truth belongs only to his waking hours. Whence an intuition is something more than an experience of a particular of consciousness; it is an act of experience with a superadded conviction of the truth of something which stands in relation to the act of experience.

We continue, therefore, to insist that Dr. Laycock's system, in so far as it confuses the pupil by the new or loose use of established terms, is unfit for teaching practical psychology.

Dr. Laycock may possibly have some mode of escaping from our argument drawn from a dream. Yet there cannot be a doubt that he teaches a confusing doctrine, when he says, that all truths rest on experience. Here nothing will satisfy the principles on which our ideas rest, but the distinct avowal that the evidence of intuition and the evidence of experience, are wholly separate and distinct. There may be a debate in psychology whether a particular truth be a truth of intuition or a truth of experience; but according to the received principles of human knowledge, there can be no question as to the evidence of intuition being another thing altogether from the evidence of experience. What Dr. Laycock seems to confound is, the experience of a state of consciousness with the perception of truth. Every state of consciousness is undoubtedly an act of experience. But of what is it an experience? It is an experience of the existence of the being which has the consciousness; it is the experience of the susceptibility of that being to exist in that particular condition of consciousness. Nay, more, if the state of consciousness in question be the sensation of a red colour, it is the experience of a red colour external to self; if it be that of a green colour, it is the experience of a green colour external to self; if it be the remembrance of a red colour, or of a green colour, it is the experience of a red or green colour, which is a part of self. Yet again, all these things are truths, and, nevertheless, they are not truths of experience—they are intuitive truths. They are experiences of truths, yet not truths of experience. When a red surface is for the first time presented to the eyes of a living being, the sensation arises which is ever after recognised by a particular symbol. The same is the case with a green surface. In both cases the first sensation is an act of experience; but has the experience anything to do with the ability of the living being to recognise the one sensation as distinct from the other? Not at all. That ability is conferred by the constitution of the mind:—that is, it is the effect of intuition. So when such a being regards the experience of the sensation of red as being from without, while he determines the experience of the remembrance of the sensation to be from self, he acts, not by experience, but by the constitution of his nature, or by intuition. If it be asked what man learns by the evidence of experience—the answer is, that there are things which intuition cannot teach. He learns that wood floats in water; that stones sink; and yet, after a time, he discovers that there are some exceptions, as some woods sink, and some stones float. Man also learns to dance by experience; he learns to skait by experience; the child learns to avoid the fire by experience, and will not readily touch the harmless burning delineations made with

phosphorus. To the determinations of intuition exceptions hardly occur; two and two always make four; the whole is always greater than its part. When the proposition that two and two make four is presented to a man's mind, he feels its truth; he has an experience of its truth; and this is what seems to mislead Dr. Laycock into the proposition that all truths are truths of experience. In the same manner—that the whole is greater than its part, is not a truth of experience, because a man, when the proposition is presented to him, has an experience of its intuitive character of truth. That such propositions have not the evidence of experience in their behalf is readily shown by the counter-propositions, namely: that two and two make five, or that a part may be equal to the whole. For when these propositions are present to the mind, there is an experience of consciousness, but not an experience of their truth, but of the contrary. We, therefore, still ask on behalf of Dr. Laycock's pupils, what he means when he says—"Man instinctively distinguishes himself from all other things around him, and not of him, which to him constitute the external world." (Vol. i, p. 117.) What we ask is: whether, according to his system, the knowledge of the external is the result of experience; or is it a piece of knowledge independent of experience, which only requires experience for its development. His answer is fundamental as respects his system; and until he makes his election, his system, as a system of psychology, is full of confusion.

We wish Dr. Laycock to understand that when we said that his work is in no sense practical, we meant that he has failed in particular to make his system intelligible to those who seek the knowledge of practical psychology at an easy price of labour.

Dr. Laycock sets out in his reply to our critique with controverting a proposition laid down by us to the effect that "the way to practical improvement in almost every department of science and art, is in the opposite direction to generalisation."

Dr. Laycock, in attacking this proposition—very unwarrantably if he had kept the spirit of our observations on his work in his mind—endeavours to make it appear that we advocate in the above proposition, one of the following two modes of advancing science. 1st. "Either it consists in the exercise of mere practical tact or dexterity, without a distinct perception or knowledge of general laws or principles, commonly known as the rule of thumb, which science enlightens; or 2nd. It is to be found in the deductive or *à priori* method by which principles are reached by means of logic instead of observation and research;" and he conjectures that the latter is the mode which we prefer. Our readers will bear in mind that Dr. Laycock throughout his work is unceasingly extolling his own method as superior to the psychology of the schools as a means of practical instruction in psychology. It was then, with a strict reference to Dr. Laycock's continual self-glorification in connection with the word

"practical," while we perceived the vast generalisations exhibited in his system, on which no slight praise was lavished, that the proposition here attacked by him arose in our minds. We felt that the common systems of psychology were already too much of the nature of abstract propositions for practical use; and with a system still more abstract, and embracing still larger generalisations before us, pretending to be practical, naturally gave utterance to the statement in question. We trust, however, presently to show to the satisfaction of our readers, that sentiment to be perfectly true in the sense in which it was employed. What is the practical? With what does the practical deal? Does not the practical deal with individuals, while the scientific deals with species, genera, orders, classes? But does generalisation descend from classes, orders, genera, species to individuals, or ascend from individuals to species, genera, orders, and classes? Were we not then entitled to say, that the way to the practical is usually in the opposite direction to generalisation? In psychology, perception, memory, imagination, judgment, curiosity, ambition, gratitude, pity, hatred, revenge, self-love and sympathy, taste, conscience, are all pure abstractions, to employ which in a practical manner it is necessary to pursue the opposite course from generalisation, and to regard them as they are exhibited in particular individuals. A man is a practical psychologist who can readily catch up the deviations which insanity has produced on the mind of an individual in respect to the operations mentioned above, as compared with their operation in persons of average sound mental condition. But the training for such a facility of observation is not obtained by pursuing large generalisations, but after a studied acquaintance with the prominent features of the generalisations referred to above, to mingle freely with individual men both in the large circle of the world and in the narrower circle of asylum life; or, in short, to seek the practical in the direction opposite to generalisation.

Every great physician is a practical physiologist; but if he be a clinical lecturer like Dr. Laycock, he does not attempt to teach his pupils the proper practice of medicine by striving after new generalisations of the known phenomena of physiology, but by descending to the details of the individual sick before him, while he converts the abstract into the concrete.

Every skilful agriculturist is a practical chemist; but he does not seek to augment his crops by endeavours after new generalisations of the known phenomena of chemistry, but by studying to become more immediately conversant with the individual composition of his own soils.

Every mineralogist also is a practical chemist; but he does not seek to improve his knowledge of the forms of natural bodies by new generalisations of known phenomena, but by applying himself to the

study of the minute composition and aggregation of the individual substances that are the subjects of his research, while he has often found occasion to reverse the process of generalisation, and to pronounce that to be multiple which was believed to be one.

Dr. Laycock affects to think that we teach that the inductive method is not the way to advancement in science, and that we deny generalisation to be a principal mode in which progress is made. Accordingly he sets about the very unnecessary task of showing that the generalisations in optics have improved the telescope and microscope; that on the generalisations of Newton the whole modern science of astronomy rests, and so on.

There is not a syllable in either of our two critiques that warrants Dr. Laycock in making such an assumption. If the word "practical" be left out of the proposition which he attacks, it becomes one of a very different character.

He sets up a man of straw, which he finds it easy to demolish. Let the reader observe the difference. Here is Dr. Laycock's straw fabrication. "The way to improvement in almost every department is in the opposite direction to generalisation." This proposition is untrue; it is absurd; it is spurious; it is not ours.

How sorry a figure will Dr. Laycock make if he resorts to such a defence as that practical improvement depends on scientific improvement, and if generalisation be the way to scientific improvement it is therefore the way to practical improvement. Yet this manifestly is the lesson which he has taught himself in practical psychology by the large generalisations in which he has indulged. If we should ever again visit Edinburgh and having met Dr. Laycock on the street should ask him the nearest way to the Carlton Hill, and he should point in an opposite direction, we shall expect him to say in answer to our reproaches at our next meeting that he pointed in the opposite direction, because, in that direction, we should have found a guide to show us the way. We entreat Dr. Laycock to give up such methods of making himself singular.

There is as little doubt as to generalisation being the usual mode in which scientific improvement is made, as that deduction, or the method opposite to generalisation, is the principal means by which practical improvement is accomplished.

We must deal with the remaining part of Dr. Laycock's answer to our objections in a more summary manner.

In his arrangement of our objections the second article is—that we have represented that the generalisations attempted by him cannot lead, and have not been capable of application to improvements in practical metaphysics. We can discover no foundation for this statement in our observations, except in the following passage, to which we distinctly adhere. "Dr. Laycock's system is in no sense practical. In its present state it is a purely speculative view. It is on its trial.

It cannot be of practical use, in the ordinary sense of that term, until it be more or less generally adopted; and in order that it may, if sound, be generally adopted, we are most desirous that it should receive fair discussion." He agrees with us in our description of what practical psychology is:—so far we are at one. We say his system as regards its great principles is on its trial. We trust it will turn out largely and usefully applicable even to practical psychology. But we have felt compelled to point out at length a great and principal barrier to its immediate success in the number of instances in which he has confused his readers by employing important words of received and established acceptance in a new signification.

In the next page Dr. Laycock, with a wonderful forgetfulness of the whole spirit in which at once our commendations and animadversions are written, concludes that we advocate, as the best way to practical improvements in science the *à priori* method, or that by which principles are reached by means of logic, instead of observation and research. The following passage in our first notice of Dr. Laycock's work is probably that which his fertile imagination has metamorphosed into the above form. "The great fault charged by our author against the old method of metaphysicians is that they limit their inquiries to the subjects of consciousness; and that their knowledge is confined to what can be acquired by reflection on what is supplied by consciousness. As respects that part of special metaphysics termed psychology, we think that limit should be rigidly preserved, always with this understanding—that whatever consciousness may be found to include, shall be admitted, notwithstanding that it may be beyond the limits fixed by some of the older metaphysicians. While psychology limits itself to what consciousness supplies, it is so far from interfering with the extension of human knowledge in any possible direction, that the very purpose of psychology is to render man's exertions in the pursuit of true knowledge more effective.

"Our author is not forbidden by psychology to direct his investigations to any quarter in which he sees reason to expect discovery, but he is not at liberty to blame psychology for not attempting studies which lie beyond its sphere."

In the next paragraph the crow Dr. Laycock has to pluck with us is thus depicted:—"On my title page I state that my work contains the correlations of consciousness and organisation with their applications to philosophy, zoology, physiology, mental pathology, and the practice of medicine. Dr. Bushnan had therefore an abundant choice of practical departments from which to select test questions; he limits himself, however, to the department of philosophy, and even selects the most speculative questions of that department" (p. 498, January, 1862.)

In the first place, our debate with Dr. Laycock does not turn on the point whether he does or does not apply his system to practical departments, but on the question whether his system, as treated in his books, is practically applicable to such subjects. Our business clearly was first to examine his philosophy, and to satisfy ourselves as to its intrinsic truth; and as to the greater or less facility of apprehending its principles, as set forth in his method of exposition, before taking up its application to practical subjects.

Dr. Laycock next cavils with us for intimating our belief that some of the discussions in the psychology of the schools had proved the most useful exercises ever introduced for the enlargement and strengthening of the human understanding. Under the same head he charges us with confounding the study of logic with that of psychology, and brings to bear against our opinion the recent introduction of modern natural sciences by Oxford and Cambridge, into the range of University studies. We meant what we said; and we did not confound logic with psychology; and we are ready still to do battle for our opinion, even if the two respectable old ladies referred to should consent to back the Edinburgh professor. We regard it as undeniable that the highest exercise of human thought is that which turns on objects which have no sensible representatives. Such an exercise of thought belongs not merely to psychology, but to all the subjects which fall within metaphysics. Even in mathematics this kind of exercise of thought is not obtained; since lines sensibly represent space. Still less is such an exercise to be gained in the study of the physical sciences and natural history—nor even in logic, for all logic may be represented by symbols. We do not dispute the advantages in the way of culture to be derived from the well-directed study of any subject of knowledge. But it seems clear that where sensible objects are concerned, inferior intellects may make progress, while pure thought is the field for the greatest exertions of the intellect. But what we most wonder at, is that an acute metaphysician, like Dr. Laycock, should suppose that the best school for teaching the student the rigid use of words is that in which the sense of those used is incapable of being mistaken. We have heard of a head cook being sent to learn how to boil a potato, but we hardly expect the refinements of cookery in one bred in a kitchen where nothing but potatoes are boiled. It is the very tendency in metaphysics to ambiguity of language that affords the lesson to the student; so that, in our mind, Dr. Laycock's elaborate proof as to the ambiguity of words in psychology, as an answer to our statement, is wholly thrown away, as well as his suggestion that exactness of phraseology is only to be learned in the physical sciences and natural history. We repeat, that there is little comparative exercise in the difficulties of thought and language in the latter studies, as

contrasted with that called forth by the whole range of metaphysical pursuits.

Dr. Laycock, in the next page, attacks us for maintaining that there are different kinds of consciousness, and "that each of these has its knowledges and laws as objects of scientific investigation, in entire independence of the other." We cannot discover where we have laid ourselves open to this attack; and we deny that the opinion here raised up for demolition is common to us with the old school of psychology. We have been accustomed to consider all the states in which mind can exist as so many states of consciousness; and we know that this is the view of consciousness most commonly taken of late by the metaphysicians of the schools. There was a time, no doubt, when a clear mode of expressing the oneness of consciousness did not exist; there was a time, after the science of psychology had made much progress, when a distinct word for consciousness did not exist in the Greek language; but surely, when Dr. Laycock mounts his hobby to attack the psychology of the schools, he should have a greater sense of justice than to ask his opponents to use in their defence only the rude weapons of early times, when he comes armed cap-a-pie with all the advantages of modern mental physiology. Consciousness is, indeed, one; but there are many very different states of consciousness. When an oyster in its bed closes its shell on the approach of danger, there is a consciousness. When Dr. Laycock draws himself up to repel a blow, there is a consciousness. Here the consciousness is one—the states are different; the first is ordinary, the second, we trust, even in the pugnacious city nick-named the modern Athens, is extraordinary. When Dr. Laycock sees York Minster before him, there is a consciousness; when he sees it in a dream, there is a consciousness; the consciousness in both cases is one—the states are different. The first is ordinary; the second extraordinary. After this full confession of our creed on the subject of consciousness, we trust Dr. Laycock will not again throw away so much ink, if he should ever catch us using so apparently harmless an expression as "ordinary faculties of the mind," out of which it is plain the whole of this part of his attack has grown.

When our readers are told that on the following passage from our critique several pages of attack are founded, they will perceive, we think, that nothing will content Dr. Laycock but an unqualified subscription to all his views, including all his glorification of the system he supports, and all the ungenerous abuse he pours on the psychology of the schools, to the study of which, beyond doubt, he owes his own power of writing a book like that under consideration. The passage is as follows: "It seems manifest, however, that the proper rule in the old system of psychology, is to take evidence solely from consciousness in the mature state of the mental faculties, and to regard at least all inferences from what must have occurred in childhood as

belonging, not to the metaphysical, but to the physiological side of the inquiry—that is, the investigation by observation and experience.” (p. 375.)

Such a passage as this, instead of being used by Dr. Laycock to attack our sentiments, should have been viewed by him as a manifest concession to the kind of inquiry into the functions of the nervous system, which he advocates. Dr. Laycock’s system is a system of physiological psychology; that is to say, an inquiry into the functions of the nervous system on the usual grounds on which physiological inquiries are prosecuted. We have everywhere admitted, not merely the usefulness, but the necessity for further progress, of such a physiological inquiry; and we have not anywhere condemned Dr. Laycock’s particular mode of conducting such an investigation. Nay more, we have bestowed much commendation on what is the most remarkable part of his book and the most special to himself, namely, the large generalisation “that mind is the cause of all phenomena, and therefore the cause of all vital action and of all thought.” Now the passage above quoted from our critique bears on the face of it that we are advocates for a physiological investigation of mental phenomena; yet in spite of manifest proofs, everywhere abounding, of our advocacy of a system of inquiry analogous to his own, he sets us up to be pelted at, as a figure representing the genius of the old psychology in its rudest condition.

He continually forgets that it is not the merits of the old psychology which is the proper subject of debate between us; that is only an incidental topic, brought up by his unceasing abuse of that psychology; and that the real ground of debate is the excellences or defects of his occasional modes of studying mental phenomena by a physiological method. The passage above quoted from our second article, which Dr. Laycock uses most unwarrantably to convict us “of being true to the principles of our method, which (according to him) restricts even the sphere of speculation, while it is confessedly opposed to induction and generalisation,” occurs in a paragraph devoted to the consideration of the respective merits of the psychology of the schools, and what we have termed physiological psychology. In that paragraph, there is a sentence which shows how little we are wedded to our mode of cultivating psychology. It is as follows:—“this (the inquiry into the respective merits of the two systems) is a very important inquiry, and we profess ourselves ready to adopt whatever conclusion is best sustained by a review of the whole facts concerned.” This is not the language of one so blinded by devotion to an ancient creed as to have become incapable, so Dr. Laycock represents us, of understanding the uses of the generalisations of science. This part of our character, to be sure, Dr. Laycock claims as a discovery of his own, on grounds however which we think we have shown, a few pages back, to be very fallacious, and the

assumption of which as true to be an indication that our author is liable to fall into a reverie of delight with his own speculations, while the standers by cannot help laughing at the figure he makes. If further proof were needed that we are not so blindly wedded a Dr. Laycock represents, it is to be found on the same page, where we state our belief that in the development of the mental faculties there are numerous sources of instinctive belief, but that the proof of this fact is not to be obtained except from the kind of evidence which belongs to physiological psychology. In short, we defy Dr. Laycock to point out any passage in either of our two articles that either condemns the principle on which physiological psychology rests, or even intimates any decided preference for that of the old psychology, or the psychology of the schools. Neither have we condemned the principle on which Dr. Laycock's peculiar form of physiological psychology rests. We said in our first article, "we make Dr. Laycock quite welcome to pursue his own method of inquiry, and in common, we are sure, with the philosophic world at large, we shall feel grateful for whatever benefits the pursuit of that method may ultimately confer on science." We are still ready to acknowledge that these benefits may be great—if Dr. Laycock himself does not studiously throw obstacles in the way of his system becoming a standard reference in psychological science. We have blamed nothing in his two works except such things as we sincerely believed to stand in that light. We have blamed, for example, his continual attacks on the old system of psychology, or, as we have usually termed it in this article, the psychology of the schools. Now this we regard as a great fault, because the two systems do not stand in opposition to each other. It is not necessary for the establishment of Dr. Laycock's views, that the psychology of the schools should be overthrown. The psychology of the schools has risen to its present height by the successive exertions of many of the greatest minds which our human nature has produced. It is reared no doubt on a narrow basis; yet on that basis it stands a monument of the transcendent powers of the human intellect. It may be that in point of principle it cannot be carried much beyond its present bounds. Nevertheless it is a demonstrable error on Dr. Laycock's part to think that this old system cannot be made subservient, in the highest degree, to practical psychology. It is true that when we desire to convert it into a practical system, we must leave off generalities, and descend to particulars. We must study the phenomena of mind as they appear in individuals. Dr. Laycock is perhaps simple enough to think that, because the great laws of human thought in this system are investigated only as objects of consciousness, it is therefore forbidden to remark the modifications and variations of these in individual minds. The application to individual minds of the great conclusions drawn from reflection on the objects

of consciousness in the old system, is as open to those who cultivate it, as is the like application of principles established by the evidence termed physiological. Dr. Laycock will doubtless find himself mistaken, if refusing to listen to a gentleman, "who" (according to him) "looking for the practical in mental science can find no better tests for it than the insoluble problem of the nature of the Deity, or the uses of metaphysical logomachy, and the like wearinesses," he expects to reach the practical in his psychology by heaping generalisation upon generalisation, instead of acknowledging "that the way to the practical, in almost every department of science and art, is in the opposite direction to generalisation."

But to recur to Dr. Laycock's continual abuse of the psychology of the schools: what right has he to heap ridicule on this part of metaphysics? Is it that his genius is superior to that of the great men whose names through long ages adorn the paths of psychological literature—and fit to throw them all into the shade? Even if his system were sufficient entirely to overthrow the old psychology, he would owe his success to nothing else but to the great and rapid strides of advancement made within a short period in the knowledge of the economy of living nature, and above all, in the anatomy of the nervous system throughout the animal kingdom.

We need not fatigue our readers with a recapitulation of faults besides those which we have pointed out in Dr. Laycock's book;—but this we repeat, that none of the faults we have dwelt on are involved in the leading principles of his system; they are extrinsic and capable of being removed. And removed they ought to be, for assuredly they are of a kind to weigh down and sink any system of psychology however excellent, however otherwise well founded.

Dr. Laycock has not been able successfully to repel any one of our objections. It is easy to blind a careless reader by raising up men of straw which can be cut down with a stroke. It is easy to heap ridicule on us for choosing out of his book questions of a profound character; but a plain answer to plain objections would have been more satisfactory. To a man who sneers at Locke and Leibnitz as being pretenders, it would have cost nothing to give our poor objections their quietus with a stroke of his pen.

Psychological Excerpta from Foreign Journals. By Dr. ARLIDGE.*On the origin of the Swollen Ear.* By Dr. GUDDEN.

(‘Allgemeine Zeitschrift für Psychiatrie,’ vol. xvii, p. 122.)

IN the first volume of the ‘Asylum Journal,’ (p. 45 and p. 107) we translated a valuable memoir on this subject by Dr. Fischer, presenting a very complete account of the pathology of sanguineous tumours of the ear, and a critical inquiry respecting their cause. With the statements and opinions there made, Dr. Gudden mainly agrees. At the same time, he considers Dr. Fischer to have misinterpreted several facts he noticed. He ignores the presumed existence of a special dyscrasia, pointing out, as we also did, in some notes on Dr. Fischer’s paper, that these tumours of the ear are not restricted to the insane, and, furthermore, that they are produced even in those in perfect health.

With true German patience and minuteness of research, Dr. Gudden appeals to the literature and statuary of the ancients, which he seems to have largely inquired into for his purpose, and shows that these swollen ears are particularly described and named by several Greek authors, and are moreover sculptured on the heads of several ancient statues of Mars, Hercules, and Pollux.

Having thus strengthened his assertion, that neither insanity nor a dyscrasia of the blood and nervous system are necessary antecedents to the production of sanguineous tumours of the ear, he next shows that the structural changes remarked by Fischer, and attributed by him to inflammation of the cartilage and its perichondrium, may be produced in the ears of the dead by pressure and rubbing, and that it is a mistake to suppose such changes precede the effusion and formation of the swelling. The isolated detachments of the perichondrium are simple results of force, and the effusion of blood a consequence of ruptured vessels.

Though a dyscrasia is not essential, it may, notwithstanding, favour the production of the diseased state; and that this state is always the result of mechanical injury or force is proved by many considerations. Thus it is always sudden in its appearance, and from the firm union between the component tissues of the ear nothing but violent force could cause their separation. The usual position of the swelling is the outer or exposed surface of the ear, and never the meatus or protected portions. The left ear is oftener the seat of the lesion than the right, indicating that the ear has been struck with the right hand of a person standing facing the patient. The swelling

is more common in men, and men are more prone to violence and more powerful to inflict such an injury, than women. Moreover, the ears of women are protected by their caps and hair. Paralytics are more common among the male insane, and are more frequently than others subject to these swellings of the ear; but this circumstance is not to be explained by reference to the existence of a special dyscrasia among them, although it may be admitted that the morbid state of their blood in general is favorable to effusion, but rather to other causes, among which their mental condition, as one more aggravating to attendants, may be reckoned.

Flemming believes the injury may be often self-inflicted, but Gudden refers it, as an almost universal rule, to violence on the part of others; for he argues that where patients fall about and injure themselves, the ears rarely suffer. But what is more to the point, is the fact that by holding the attendants responsible for the lesion, he has found it almost disappear from the asylum. Lastly, the seat of the lesion is between the cartilaginous laminæ, and not between the cartilage and its perichondrium, in most cases.

On the connection of Osteomalacia with Insanity.

By Dr. FINKELNBURG.

(‘Allgemeine Zeitschrift für Psychiatrie,’ vol. xvii, p. 199.)

The author remarks, that though the etiological relation between rachitic softening in childhood and the development of insanity in after-life be generally recognised and illustrated by cases in every asylum, yet that the like connection between osteomalacia in adults and mental disorder, though equally real, has been let pass unnoticed.

Finkelnberg observes, that though in softening of the bones the cranium is of all portions of the skeleton the least frequently and the least seriously affected, yet several specimens of this lesion are preserved in museums, and the author himself met with two. In these instances the cranial bones acquired throughout the spongy consistence of the *diplöe*, and were often thickened; the distinction between the two tables was lost, and the sutures obliterated. The alteration in the figure of the cranium occurred chiefly at its base, the *sella turcica* being apparently forced upwards, whilst the *fossæ*, in front and behind, were greatly deepened.

Though some possessors of such crania have, as far as known, not exhibited mental disorder, and therefore though the deformity and insanity appear not necessarily connected, yet in the two cases of osteomalacia which fell under the writer’s observation, the relation was distinct. The mental disturbance was that of acute melancholia with hallucinations of hearing, ending in dementia. The osseous disease made its appearance after childbirth, and was attended with

much pain in the head and spine, and with cerebral irritation and paralysis.

On a form of Acute Mania with inflammatory lesion of the brain, and on the indications for the administration of Digitalis. By Professor J. F. H. ALBERS.

(‘*Zeitschrift für Psychiatrie*,’ Band xvii, p. 305.)

Professor Albers has given much attention to the therapeutical value of digitalis, and his results on this point are, that—1. It reduces the pulse in frequency, but at the same time does not disturb the rate of breathing. Even when the heart is empty and brought to a stand-still, the regularity of the respiration proceeds. 2. Alterations in the urinary secretion; an increased quantity of urine in the healthy, and a still greater augmentation when the drug is given in inflammatory dropsy accompanied by inflammatory irritation of the serous membranes of the chest and abdomen. It subdues the inflamed state of the kidneys and restores them to their normal functional activity. In mental disturbance dependent on cerebral inflammation, especially of the serous membrane, digitalis exerts a remarkably curative effect when given after preliminary abstraction of blood and the use of antiphlogistics. 3. The solid constituents of the urine are increased in amount, and particularly the urea, as shown both by chemical examination and by an increase of specific gravity. This alteration in the urine becomes manifest, when the digitalis has reduced the frequency of the pulse and produced a feeling of lassitude. 4. Reduction of the temperature of the body, and its equalization. 5. Vertigo, lassitude, debility, and moroseness, accompany the reduction of the pulse by the drug. The last-named condition is a remarkable symptom associated with the operation of digitalis on the system. 6. This medicine is applicable only to those cases of madness dependent on some inflammatory lesion.

These results, says Albers, are deduced from numerous experiments and observations on the lower animals as well as on man, both in the healthy and diseased state.

On the use of Opium in Mental Disorder. By Dr. LUDWIG MEYER.

(‘*Zeitschrift für Psychiatrie*,’ Band xvii, p. 453.)

The value of opium and its various preparations in the treatment of insanity, is most fully recognised in this country, but this is not the case in many parts of the continent of Europe, and the long essay by Dr. Meyer, the medical director of the insane division of the Hamburg General Hospital, is therefore calculated to do good, by

demonstrating the fact by considerable clinical experience. From a discursive sketch of the diversity of opinions respecting the use of opium, and of the virtues ascribed to it in different parts of the world, he deduces it as a general truth, that opium acts as a powerful conservator of vital power, a restorer of expended energy and of prostrated nervous vigour.

He notices some cases of ecstatic mania, arising from debilitating causes, in which he found opium very beneficial; and he quotes others, in which he administered it from *à priori* considerations of their causes. To quote one of his cases briefly:—It was that of a woman who, with her husband and family, had been reduced to extreme poverty and well-nigh starved. The patient lay in bed, with closed eyes, in a sort of cataleptic condition, speaking and moving only when excited to it, and suffering from hallucinations of vision; this condition alternating with excitement. On the third day he gave her Dover's powder every two hours, containing, in all, three grains of opium. By this means the agitation was calmed, and she got a fair amount of sleep in the night. On the following day there was evident improvement; the opium was repeated in grain doses every hour, for five hours. Further improvement ensued, and more nourishment was taken. The opium was subsequently given less frequently, and latterly only at bed-time, and, after fourteen days, the mental disturbance was removed. To reinstate her health and strength she was retained for six weeks, and at the end of that time was discharged cured. Dr. Meyer records, altogether, seven cases of the same form of (ecstatic) mania; six of them were females, and of these, five cases were the result of childbirth and its after-consequences, and of over-lactation—in other words, of loss of blood and other debilitating causes. However, he does not consider these as the sole causes of the mental disturbance, but as conditions concurring with the insanity itself and coincident with it, and a nervous lesion of which hysteria is the principal manifestation, and one more immediately associated with the nervous system and sexual functions of females. The operation of opium he regards as indicative of this morbid relation, inasmuch as it is rapid, and doubtless acts primarily on the abnormal condition of the nervous matter, and, on the contrary, is in no direct way curative of the accompanying anæmia and debility. Moreover, in many cases of insanity hysterical symptoms are to be traced in their early history; and this is true, even among male patients whose nervous system has been greatly prostrated, as by the practice of self-abuse.

After an examination of the phenomena of hysteria in their relation with those of the hysterical forms of insanity, he arrives at the conclusion that opiates are especially indicated whenever an hysterical condition accompanies mental disorder.

Erroneous Identification as a symptom of Insanity.

By Dr. SNELL, of Hildesheim.

('Zeitschrift für Psychiatrie,' Band xvii, p. 545.)

Erroneous identification, or mistaken conceptions of persons, is a common occurrence among the insane, but on examination will be found not equally prevalent in all classes of them. Dr. Snell finds it to be most frequent in mania; in the next degree in dementia following upon mania and attended with excitement, and in acute melancholia. It is more rare in the varieties of monomania and in those of apathic dementia. On tabulating the admissions into the Hildesheim (Hanover) Asylum, with reference to this form of mental aberration, Dr. Snell found it to prevail in more than half the total number; whilst among the older residents in the asylum it was not seen in more than a third.

The following is a summary of the results arrived at by Dr. Snell:

1. Mistaken personal identification, and also illusory conceptions of places and objects, are among the most frequent phenomena of mental disorder, and the most certain and readily observed of its symptoms.
2. They indicate by their intensity and generality the degree of mental excitement, and are in general favorable in reference to prognosis.
3. They are more prevalent the more recent the mental disorder is.
4. In the transition of the so-called primary forms of insanity into the secondary, mistaken identification not uncommonly makes its appearance, and is then of bad augury.
5. In the progress of primary mental disorder towards recovery, the disappearance of this form of aberration is one of the most certain indications of approaching convalescence.

On the employment of Tracheotomy in Epilepsy. By Dr. C. WESTPHAL.

('Annalen des Charité-krankenhauses,' Band ix, 1860.)

In this paper Dr. Westphal appears as an opponent to the practice of tracheotomy as a curative proceeding in epilepsy. He resorted to it in one case with no other result than that the strength of the fits was somewhat reduced. The views of Dr. Marshall Hall, and the three cases recorded by Drs. Anderson, Kane, and Mackenzie, in illustration of the advantages of tracheotomy in shortening the fits and preventing their recurrence, he considers quite inconclusive and fallacious. The theoretical grounds for adopting the operation advanced by Dr. M. Hall, he regards as scarcely worth discussing. The notion of what Dr. Hall designated trachelismus rests on mere assertion and is not proven; and this physician, he continues, reasons in a circle respecting the dependence of general convulsions on

closure of the glottis and the utility of tracheotomy. In most epileptics the signs of trachelismus,—the venous fulness and redness of the countenance follow upon the convulsions and are secondary to them, and at the close of the fit there is no sudden pallor of the previously suffused countenance. It has certainly not been shown that general convulsions follow as a rule upon obstruction of the trachea however caused; on the contrary, Dr. Westphal has seen a case of complete occlusion of the glottis by a wedge-shaped piece of food, without any convulsions supervening.

Touching the question of the artificial production of trachelismus by obstruction of the circulation of the head, the writer refers to the researches of Kussmaul and Tenner, which show that by tying all the arteries going to the head fits of a truly epileptic character are produced.

Dr. Westphal concludes his memoir by remarking on the frequent complication of hysteria with epilepsy, giving rise to the variety called by Landouzy, "Hystero-Epilepsy."

On Parenchymatous Infarction of the Brain in chronic and acute forms of Insanity. By Professor ALBERS, of Bonn.

(*Archiv für Pathologische Anatomie und Physiologie*, von R. Virchow, Band xxiii, 1861, p. 7.)

The primary meaning of infarction was that of plethora, or congestion of an organ, but of late the term has been applied to the interstitial effusion of blood or of its elements in a tissue, giving rise to an expansion, to increased firmness, and frequently to a greater elasticity of the part involved. Such a stuffing or infarction of tissues from exudation deposits is the consequence of active hyperæmia and of inflammatory stasis, and happens especially where a constitutional malady is present, such as scrofula, tuberculosis, or a typhoid state. In the affected parts the blood-vessels are seen changed, those around them being expanded, whilst those within are contracted, and the parenchyma itself deficient in blood, the whole being a condition of unequal distribution of blood.

Different names have been given to the effused matters, according to their nature and the constitutional diathesis. Thus we read of fibrinous, albuminous, purulent, and sanguineous infiltrations, considered further under their several relations with scrofula, typhus, and other general conditions of the system. The elements of the diseased tissue are disunited by the effused morbid matter, and at the same time compressed, and hence, in all but the catarrhal variety of infarction, there is condensation and induration, and even in that, although soft, there is an unusual elasticity present.

Infarction is distinguishable according as it is chronic or acute;

the latter variety is the more frequent. When it seriously interferes with the function of an organ, such as of the liver (in cirrhosis), and of the lungs (in hepatization), it is fatal sooner or later.

In the brain a fibrinous infarcted matter is often to be met with in typhus and in cases of insanity, and gives rise to the condition described as "*cerebral sclerosis*." This lesion has for many years been observed in patients dying from typhus during epidemics of that fever. It is shown by an increased volume, and a more compact and firmer consistence of the brain than normal, and this, too, in naturally soft parts, such as the soft commissure and the olfactory nerves. On slicing the brain, the thin laminæ are found to be tough, like white leather, though much more lacerable, and to have an unusual elasticity under pressure. The colour is often a yellowish or a dull white, and an unequal distribution of blood is perceptible throughout. Some capillaries are double or treble in size that of others normally similar, whilst others are constricted and almost obliterated. On examining the brain when hardened in chromic acid, by the microscope, the histological elements are discoverable, more or less unaltered, and between them a multitude of corpuscles and granules and a semi-transparent matter, varying directly in amount with the severity of the lesion. These changes are more distinct in typhous infarction than in the scrofulous.

The disease may attack every part of the brain, but is most developed in the cerebrum, the anterior lobes of which again seem more prone to it. Moreover, the upper surface is more frequently attacked by it than the base of the brain. In the brains of the insane, it has, when found, the same characters as in those of fever patients. The fever epidemics, in which this lesion has been most prevalent, have been distinguished by the unusually high delirium present, the rapid sinking of the vital powers, and the absence or insignificant amount of alvine derangement.

The same condition of the brain has been met with in patients dying after acute delirium, and in imbecile children, in whom irregular nutrition of the cranium and enclosed brain mass has probably given rise to a sub-inflammatory state. Professor Albers details a case of the sort in which the lesion was chronic, the dementia supervening after convulsions in the first year of infancy, with irregularity in the cranial bones and sutures, and afterwards complicated with fatal convulsions of a different form. In another case the lesion was acute, preceded by long-continued headaches, followed by melancholia, and then maniacal excitement, and death by coma.

Scrofulous parenchymatous infarction often attacks isolated parts, but more frequently the whole cerebrum. It occurs in children and young people of scrofulous habit; and according to its severity and extent gives rise to different disorders of the cerebral functions, which usually advance to a certain stage of development and then are

arrested. During this period the brain is very prone to inflammatory excitement and to meningitis, and a foundation is laid of mental disorder of a monomaniacal character, and either with or without a disposition to mania. An anti-strumous course of treatment has been found beneficial and even curative in such cases.

Albers is disposed to consider that form of cerebral disease described as acute hydrocephalus, in which there is hypertrophy of the brain without vascular congestion, as allied to, if not a variety of, scrofulous infarction. To the same category he refers another lesion associated with struma, which commences by an attack of gastric fever of an intermittent type, followed by convulsions, such as are seen in chronic hydrocephalus, that become more frequent as a fatal termination approaches. After death the brain has a rather firm consistence, and only a very inconsiderable quantity of fluid is present in the ventricles. Meckel and others record many instances of induration of the brain found in lunatics, but though there was increased firmness there was no actual increase in the weight of the brain matter compared with equal portions of healthy brain, except in a slight degree in one or two examples. This Albers considers explicable on account of the absorption and wasting of the cerebral matter following the deposit of the morbid exudation. As to the symptoms of infarction, he points to such as have been generally assigned to inflammatory affection of the brain, as persistent headache, mental oppression, exalted irritability, great restlessness, a normally frequent or a slow pulse, and repeated convulsions. If inflammation be present, local and peripheral affections of the nerves, squinting, paralysis about the muscles of the face, or of the limbs, &c., rarely fail to show themselves; whilst they, on the contrary, are absent in infarction.

Cases of infarction have for a long time been described as instances of chronic inflammation in the lungs, liver, and spleen; and in many such fibrinous exudations have been met with, in the form of new connective tissue. A similar fibrinous infarction is sometimes met with in the brain and spinal cord, though not distinctly traceable, it may be, to antecedent inflammatory action.

An inquiry into the Causes of Melancholia. By Dr. CARLIEU.

(‘Bulletin de l’Académie de Médecine,’ 1861, p. 479.)

This inquiry is long drawn out, and results in little of practical utility. The author has a wondrous hair-splitting faculty, and would well-nigh make as many species or forms of melancholia as there are sufferers from the complaint. He defines melancholia as a cerebral necrosis, consisting in a partial and lasting aberration of the intellectual faculties, without fever, and characterised by painful ideas. He makes two genera:—1. Melancholia, without error of

judgment, and with consciousness of the condition and cause of suffering; and 2. Lypomania, with aberration of judgment, and without consciousness of the mental disturbance. Of the first genus, he adduces as distinct species: 1. Suicidal melancholia, or as he names it, antophonomania; 2. Erotic lypomania or Erotomania; 3. Panophobia, or as he prefers to call it, Pantophobia; 4. Nostalgia. The second genus comprises the following species: 1. Nosomania or hypochondria; 2. Lypomania of persecution, or misanthropia; 3. Lypomania of legal troubles, or Diceomania; 4. Demonomania; and 5. Lypomania of poverty, or Panemanian.

He examines the causes of melancholia attributed to age, sex, mode of life, &c., and remarks that infancy is almost entirely exempt from this disorder, except we refer to it that remarkable sadness sometimes met with before death in infants. He confirms Esquirol's statement of the much greater proclivity of females than of males to melancholia, and points to uterine derangements as the potent cause. Of the temperaments he places the nervous as the first in predisposition to the disorder.

Mental disorder, he asserts, increases as civilisation advances; a conclusion which might make us long for a return to primitive barbarism, but which, if examined accurately, will resolve itself into the proposition, that the vices of modern society and the transgression of the laws of health, of morality and of religion, is the root of the evil and of its increase. This is illustrated, indeed, by the implied results of civilisation, as detailed by M. Carlieu, as causes of melancholia; to wit, over-speculation, excessive application to business; political revolutions, and exaggeration of material enjoyments.

It would be marvellous for a continental writer on melancholia to fail to remark on our wonderful proclivity as a nation, to what our European neighbours will insist on as an English disease, and will call "the spleen." We are, to every continental imagination, a splenetic people, a grim, pleasure-hating nation of the old Covenanter type, and M. Carlieu, adopting all this as a matter of fact, explains it by the influence of the east wind, which he seems to presume to be a constant visitant among us.

Having treated of all conceivable causes, physical and moral, determining and predisposing, he next aims to establish an exact diagnosis of each variety of melancholia, with the view of deducing rules of treatment appropriate to it. Hence he proposes to prefix an adjective to the term melancholia, expressive of its presumed cause; thus he speaks of hereditary, of constitutional, of professional, moral, cerebral, gastric, gastro-intestinal melancholia, and the like. In short, his research after the causes of melancholia terminates in a simple enumeration of all the influences and conditions which may operate on a melancholic patient or be associated with his mental disturbance.

On the Derivative Circulation. By M. SUCQUET.

This is a valuable pamphlet, putting some novel anatomical and physiological facts before the public. The author shows distinctly that in the body generally there are two sets of veins, differing in functional purpose; the one returning the blood, as *venæ comites* of the arteries, from the nutritive capillaries of parts, the other affording direct channels of communication between one part and another, and not accompanying the arteries. The latter are the veins of the derivative circulation, and are best exemplified in the arm. To demonstrate this venous system, M. Sucquet resorted to a black-coloured pigment for injecting the vessels, and found it the most useful, as it not only filled up and displayed the larger veins, but also by its discoloration of the skin showed where the minute ramifications of these veins were most abundant.

By these means he shows the veins of the hands and fingers seen coursing by themselves, communicating with the arteries without the interposition of those minute capillaries present where the blood is returned from the nutrient arteries of a part into the ordinary venous system. From these special veins of the hands, arise the basilic and cephalic veins, which take a superficial course, and after many intercommunications by cross channels, chiefly about the elbow, pour their contents into the ordinary system of veins near the root of the neck. Through these veins a direct course and a rapid transit is provided for the blood; and through them a coloured injection will flow, which will not find its way into the *venæ comites* of the arm. The peculiarity of these veins is shown also by the intermissions and variations in their circulating fluid; for in the deep veins the current is uniform in its flow. All this is well illustrated by the effects of heat and cold on the limb in their relation to the two sets of veins. The blood is more arterial in these superficial veins, and flows more rapidly through them towards the centre of circulation; and when from any cause the activity of the heart and of the local circulation is increased, it is seen chiefly in them. Hence they operate as a sort of safety-valve to an over-active arterial circulation, or, in other words, they constitute a derivative circulation.

Sucquet pursued his researches in the same way with regard to the lower extremities, and to the head. The derivative circulation of the cranium is not so extensive as in the arm, and is principally illustrated in the angular vein of the face, communicating with the ophthalmic vein, and by it with the cerebral sinuses, and in the nasal and mastoid veins. The practical deduction, therefore, seems to be, that if we want to relieve intra-cranial fulness, the blood should be drawn from these veins of the derivative circulation of the head.

On the effects produced in the Encephalon by Obliteration of its Arteries. By Dr. EHLMANN.

Dr. Ehrmann's pamphlet would prove valuable were it only for the *résumé* of cases where one or more of the arteries of the brain have been tied or otherwise obstructed, but he has in addition presented his readers with many original observations. From *à priori* grounds, the delicacy of the brain tissue, its evident requirement of much blood, and the serious results so often seen from even temporary derangements of its circulation, it might well be supposed that an obstruction or obliteration of one of its four large arteries would be of very serious and probably fatal moment. However, experience teaches us to the contrary even in man, and still more strikingly in most of the lower animals. Thus, interruption by compression or by ligature of the two carotids at the same time in rabbits and dogs, produces beyond a momentary staggering, very slight cerebral disturbance, or it may happen, none at all. On the other hand, the experiment is much more serious in its effects when the horse is its subject.

In the rabbit even the ligature of the two carotids and of one vertebral artery is not necessarily attended by cerebral disturbance—convulsion or the like. In the same animal the cutting off arterial supply from all its four sources was followed by epileptiform convulsions; but on the removal of the ligatures the cerebral activity was renewed.

The ligature of one carotid in the human subject, when sudden, is often fatal; but in many instances, where the obstruction has taken place gradually, no symptoms have shown themselves. One case is on record where the two carotids became obstructed by calcareous deposits, without fatal or very serious disturbance of the brain functions. Moreover the two carotids have many times been tied and the brain been uninjured, where the operation has been performed on each separately and at a considerable interval, as of from five to twelve days.

Hemiplegia of the side opposite to that on which the ligature is placed, with or without convulsions, is the most common result of tying the carotid artery. The hemiplegia and convulsions appear sooner or later after the operation, and after continuing for a time may entirely disappear. Where death has followed the operation, softening of the brain in the portion more immediately supplied by the artery, and either of the inflammatory or of the anæmic (white) kind has been usually found. At times the operation has been attended by temporary or even by permanent blindness, and more rarely by loss of power of speech. This last result may be due to the cir-

cumstance of the recurrent laryngeal nerve having been included within the ligature.

Of forty-nine cases detailed of ligature of one carotid, cerebral disturbance is noted in 30, and death in 18. Among a larger number of cases, the accidental and untoward consequences of the operation were equal to 21 per cent.

Referring to the different effects of ligature of the cerebral arteries in different animals and in man, it seems deducible as a rule, that the relative size and capacity of the arterial vessels at the base of the brain, or the facility and freedom with which an auxiliary or supplementary circulation can be established, mainly determine the occurrence or not of injuries and disorders of the encephalon when its arteries are ligatured.

New Journals of Insanity.—The commencement of the year 1861 witnessed the birth of two new French journals devoted to the consideration of mental and nervous disorders, and published monthly. One of these is produced under the able editorship of M. Baillarger, physician of the Salpêtrière, with the co-operation of a large number of the best-known alienist physicians of France. It is entitled ‘Archives Cliniques des Maladies Mentales et Nerveuses, ou choix d’observations pour servir à l’histoire de ces maladies. Recueil mensuel,’ and is issued at a reduced rate to those who are subscribers to the ‘Annales Medico-Psychologiques,’ to which old established journal it may be considered supplementary. The other new periodical, the ‘Journal de Médecine Mentale résumant au point de Vue Médico-Psychologique Hygiénique, Thérapeutique et Légal, toutes les questions relatives à la Folie, aux Névroses convulsives et aux déféctuosités intellectuelles et morales,’ is published by Dr. Delasiauve, physician of the Bicêtre, &c., with the co-operation of Casimir Pinel and several other talented physicians. It is presumable that some rivalry may exist between these two new journals; but if so, it seems to be of that commendable sort, a rivalry for good, since M. Delasiauve’s name appears among the ‘collaborateurs’ of M. Baillarger’s paper.

The ‘Annales Medico-Psychologiques’ has long held a high character for the excellence and originality of its essays; has well served the cause and progress of psychological medicine, and not unfrequently, like French plays, supplied by its articles the ground-work and substance of psychological dissertations in an English dress in our own medico-literary productions. We are therefore glad to find that these new journals are not to supplant this old favorite, but that they will take the place of the lighter monthlys as tenders to the more dignified quarterly, and fulfil their promised purpose of keeping the medical world more *au courant* with the researches in

mental pathology, and with the work effected by those specially engaged in the treatment of insanity, as well as by other physicians. M. Delasiauve sets forth as his reasons for producing his small monthly brochure, that the 'Annales Medico-Psychologiques' is a journal too exclusively addressed to specialists, and that consequently its valuable papers are lost to the bulk of the profession. It is his object, therefore, to bring together all that relates, directly or indirectly, to mental and cerebral disease; to present it in a practical form, excluding long disquisitions, and to seek the co-operation of physicians not specially occupied in the treatment of the insane.

In all respects M. Delasiauve's journal has a wider scope than that published under the direction of M. Baillarger, which is exclusively a clinical record of cases of insanity communicated by various physicians attached to the French asylums. The editor states that its object is to form such a collection of well-observed cases that in course of time a much more certain and more accurate knowledge of the pathology of mental disorder may be arrived at than we at present possess. Three fourths of the journal will always be occupied with the detail of original cases, and the remainder with clinical histories recorded in foreign journals or described in books of repute.

Thus, though these two new periodicals may compete for public support, they do so under a different form, and each, we hope, may succeed in establishing itself in public favour.

Kleptomania.

THE injudicious defence of two lady thieves on the plea that they were subject to that form of mental unsoundness to which Mathey* and Marc have given the sounding title of kleptomania, has attracted public attention to this form of mental disease, and has given rise to a considerable amount of written and spoken nonsense upon the subject. Even "our facetious contemporary" has had his jests and his caricatures thereupon, and in the slang of the day a burglar has become a kleptomaniac, and a prison a kleptomaniac hospital. Alienist physicians have of course received their full share of sarcastic remarks, as theorists not over-wise nor over-useful to society, who would willingly provide for every crime a decent veil, by referring it to some strange form of mental disease. Now there is such a thing as theft which is the result of mental disease; and also, let us boldly avow our conviction, though we write within the precincts

* 'Récherches nouvelles sur les maladies de l'esprit.'

of a madhouse, that there is such a thing as theft which is simply a crime, an attack made by the selfishness of one individual upon the rights of another. Let us even take the broader ground, and avow our profound conviction that insanity and crime are distinct and separate entities, wide as the poles asunder in all instances where their distinctive characters are well marked; although undoubtedly there are instances which are divided by partitions as thin as those which Dryden places between wit and madness, or rather instances in which the qualities of crime and insanity are so intimately combined that the task of analysing the nature of the act becomes no easy one either to jurist or physician.

The marks of crime, and not of insanity, were so strongly impressed upon the instance above referred to, that it is no wonder the defence of the criminals upon the plea of insanity converted this question of scientific interest into a public jest. Two young women belonging to that class of society which is supposed to entitle them to the designation of ladies, wealthy and high-born ladies, as the paragraph writers say, were detected thieving in a remarkably systematic manner. They go to a shop, examine goods, some of which they pretend to purchase, and order to be sent to a false address, and in the meanwhile they take the opportunity of secreting and stealing other goods. Thefts due to insanity are not perpetrated in this systematic manner, neither do insane thieves usually act in combination; and besides the want of combination, which is a characteristic of the acts of the insane, the chances would be a million to one against two insane thieves finding themselves in sufficient proximity to act thus, even if they were capable of so doing. Such a defence, therefore, in this particular instance, was simply absurd. Moreover, if this defence had succeeded, it might in course of law have resulted in sending the lady thieves to abide release at her Majesty's pleasure in the criminal ward at Bethlem, or at the new State Asylum at Broadmoor when it is opened, an alternative to which a temporary seclusion at Cold Bath Fields might be infinitely preferable. We remember a distinguished judge once advising an injudicious counsel to withdraw the plea of insanity for an offence of no great magnitude, on the ground that he was helping his client out of the frying-pan into the fire. The counsel took the hint, and if we remember rightly, the accused man escaped both doctors and gaolers from want of sufficient evidence. May we not inquire who were the legal advisers of the shop-lifting ladies, whose offence has pointed so many jests, and suggested so much nonsense?

It must be admitted that writers on insanity, and even writers on the jurisprudence of insanity, have not been very successful in describing and defining the characteristics of thieving madness; for they have mixed up in a sad jumble descriptions of the thieving

propensities of persons who are undoubtedly insane, with those of the monomania of theft in which the propensity is the principal indication of an unsound mind, and again, with certain rare, but most curious and interesting cases, the nature of which they have not taken the pains to investigate, and which we believe to be neither allied to insanity nor to crime, but to be a kind of mental and physical *tic* quite unconnected with any idea of appropriating the property of others, which is the very essence of theft. We are inclined to believe that insane thieves are not quite so common as one would at first be led to suppose from the perusal of works of insanity, for although we find writer after writer asserting that thieving is one of the most common symptoms of mental disease, there is a most suspicious resemblance in the examples which they give to illustrate the doctrine. Dr. Daniel Tuke gives the most complete *résumé* of the instances on record, at p. 207 of the 'Manual of Psychological Medicine;' many, however, of his instances are taken from Marc, and Marc we find took most of his instances from Gall. We shall append to these observations a translation of Gall's cases, which will perhaps amuse some of those who are best acquainted with works of insanity, and know how to appreciate the amount of original information which they contain. Lavater's thieving physician has certainly done duty everywhere. In this country he is generally thought to have been a Bristol practitioner, from the way in which he has been appropriated by an able writer from that city. Then there was that funny thief of Vienna, who only stole pots and pans; he is as ubiquitous as the doctor. It must indeed be admitted, that if kleptomania be a common form of insanity, we are sadly in want of new instances to illustrate its phenomena. Yet there ought not to be much difficulty in obtaining such instances, if we may accept what the 'Times' newspaper said a few years ago (April, 1855), when another lady thief was prosecuted for stealing cambric handkerchiefs in a draper's shop. A prosecution was instituted, against her, which is said to have been a very bad thing for the man whose goods were stolen. "It would be a bad thing for the coo," said Stephenson, "if she got before the train," and the draper was no more than a cow standing before the express train of good society which he affronted by prosecuting the lady thief. The 'Times,' on that occasion, delivered itself on the subject of kleptomania in the following terms. "It is an instance of that not very uncommon monomania, which leads persons, otherwise estimable and well conducted, to pilfer articles of a trifling value, in obedience to the impulses of a diseased imagination. The fact is notorious, that many persons of high rank and ample means have been affected with this strange disorder. *Every one who is acquainted with London society could at once furnish a dozen names of ladies who have been notorious for abstracting articles of trifling value from the shops where they habitually dealt. Their*

modus operandi was so well known, that on their return from their drives, their relatives took care to ascertain the nature of their paltry peculations, inquired from the coachman the houses at which he had been ordered to stop, and, as a matter of course, reimbursed the tradesmen to the full value of the pilfered goods. In other cases, a hint was given to the various shopkeepers at whose houses these monomaniacs made their purchases, and they were simply forewarned to notice what was taken away, and to furnish the bill, which was paid for as soon as furnished—and as a matter of course, by the pilferer herself, without any feeling of shame or emotion of any kind.”

A very common form of insanity, indeed this must be, if this be true, that any one in society could at once name a dozen lady kleptomaniacs; but whatever the truth may be as to the wide-spread prevalence of shoplifting, we disbelieve the prevalence of the insane motive. If it be true that attempts at shoplifting in London, by so-called ladies, are an affair of every-day occurrence, necessitating the constant employment of vigilance on the part of shopkeepers, to prevent loss which would in the long run and in the aggregate be serious, it accords little with our experience of the insane to hear the motive attributed to mental disease. At the first blush this may seem a most incredible state of affairs. If, for example, you take a model English lady, intellectual, refined, sensitive to the slightest touch of shame, truthful and true, the centre of a home in which the dearest social affections are nurtured in that modest retirement from publicity and avoidance of parade which are the characteristics of the home of such a person; it seems, nay, it is impossible, that such an one could betray herself to public scorn by perpetration of one of the meanest of crimes. But there is another aspect to this matter. The struggle for existence in the middle, and even in the upper classes of our complex social system, combined with the prevailing fashion of an emulative and showy expenditure, make the sense of want felt keenly in many an English home, where no traces of vulgar poverty are discernible. The really poor steal because they want bread; the relatively poor are tempted to steal because they desire the possession of that which seems, to a mind trained in a bad school, as essential as bread itself. And how are they tempted? How are women, whose education has been one system of skilful parade, who have been trained to derive a vast proportion of their daily happiness from that most personal of the æsthetic arts, the cultivation of dress, how are they tempted to possess themselves of its material? Are they not stimulated to covet its possession by every ingenious device which the mind of man or of woman can devise, by streets of gorgeous shops, touted in every possible manner by the most pertinacious inducements, and almost persecutions to buy, buy, buy; so that it has at last become the custom of the town-bred

Englishwoman of the present day to spend no inconsiderable portion of her time in passing from shop to emporium, from haberdashery store to magazin de mode, in the discharge of that new and peculiar duty of life called 'shopping.' Can we be surprised that when the means fail to gratify the desires thus stimulated and thus tempted, that in some few instances the desire of the eye should prove too strong for the moral sense? It is painful and humiliating if these things are so, but it is not wonderful that they should be so; and on the whole we can find more pity for the poor woman who purloins a piece of lace, without which she thinks she will be absolutely not fit to be seen, than for the smirking fellow who has caught her in his haberdashery trap by lying advertisements that he sells for almost next to nothing the very articles she so covets in her desire to make her person agreeable and attractive. The fair thieves whom it would be more true than gallant to consider as an elder kind of children, if pity does not allow them to go scathless, when they steal the gewgaws in which their hearts delight, are punished with crushing and ruinous infamy, to escape from which the imputation of madness has sometimes been considered a welcome refuge.

But what is true kleptomania? Monomania du vol? Dieb-trieb? Real stealing insanity? There is a good deal of scattered information on the subject, and yet much remains to be gathered before we understand it well. We appear yet to have scarcely got beyond that early stage in a scientific inquiry which gives us a large generalisation. We have found that some people altogether or partially insane, are incorrigible thieves, and we have generalised the fact into the formation of a class of the insane, characterised by this tendency. But if we carefully examine the cases in the category thus formed, we find that they differ essentially from each other, and upon this analytic stage, which is the wider and more important part of the inquiry, psychological writers have scarcely entered. The material for examination is yet scanty, and in this absence of sufficient data these observations are made rather as suggestions of the method of inquiry, than as presenting anything like a satisfactory explanation. Theft is sometimes one of the earliest symptoms of mental disease, and if it were to be so decidedly the earliest symptom that no other indication of insanity existed, it would, of course, be extremely difficult to diagnose the character of the theft as of pathological nature. If it should happen to be the only symptom with which the physician is acquainted, he must necessarily suspend his judgment, for it is not by the perception of one attribute that one thing, even of the most simple character, can be recognised from another, and in matters of complicated science this is still less possible. A man may at night see an object which he remarks to have a round shape, but in the absence of sufficient light he cannot tell whether it is a disk or a sphere, much less can he tell if it is an

apple, or an orange, or a ball of iron; and so the simple characteristic of theft must needs be illustrated by the qualities of the act, and by the conditions of the actor, before it can be referred to its category of crime, or of disease. One of the conditions we should look for in the act as one of disease, is a want of premeditation and design; the kleptomaniac does not go to the shop or other place with the intention of committing a theft; some other motive generally leads him or her into the presence of the temptation. In the good example given by Pritchard, a man of fortune at Scarborough, saw a friend and his daughter in a shop, and joined them; in a short time after, the mercer waited on the father of the lady, and regretted to state that the lady had taken a silk shawl from the counter; the gentleman denied the charge, and brought the man to his friend's residence, in the hall of which he found the great coat his friend had worn in the morning, and in one of its pockets was the lost shawl, which was delivered to its owner with the remark,—it is one of my friend's peculiarities sometimes to take what does not belong to him—the gentleman died of general paralysis. In this instance we first observe the want of premeditation in the theft, as the poor gentleman was undoubtedly induced to enter the shop by the motive of joining his friends; secondly, the apparent absence of any intention to appropriate the article stolen; a man of fortune, he could readily have purchased the article had he really wanted it; it was moreover an article, though this was an accident in the case, which was by no means likely to excite his cupidity; he forgot the act as soon as it was done, leaving the shawl in his pocket; and if at the time, the progress of the disease had left him in the possession of sufficient memory to have had the act recalled to him by the exhibition of the shawl discovered in his coat, he would probably have shown no symptoms of either shame, or regret, or of apprehension of the consequences. These are the notable qualities of this particular act; but in addition to these, there would, no doubt, on investigation, have been found other signs of the diseased state of mind of which it was the result. The thief's friend in apologising said, to steal was *one* of his peculiarities.

An instance in which the difficulties of diagnosis must have been greater, is recorded by another author. A clerk in a bank was accused of repeated acts of theft. Nearly all the missing money was found at his lodgings, carefully concealed in the lining of some old clothes. When accused, he treated the matter with *nonchalance* of so peculiar a character, that suspicion of alienation was expressed by his employers and friends; this suspicion would appear to have been founded upon the manner in which so grave an accusation against him was received, upon his known habits of integrity, and upon the absence of motive, his habits of life being simple, and his means competent. These facts, combined with the important one

that the money when taken was not expended, but left in concealment in the lining of cast-off clothes, were quite sufficient to justify the humane view taken of the case. It was not, however, until after the lapse of two years, that the man was found to be decidedly hallucinated. It would seem probable that if the duty of deciding on the nature of this case had fallen to the lot of harsh or ignorant men, this poor fellow would have been consigned to an earlier grave, through the painful portals of a convict prison. "En effet," says M. Morel, on this very subject, "soit qu'il s'agisse du diagnostic d'une maladie mentale, soit qu'il faille apprécier la criminalité d'un acte, nous ne pouvons rester dans une indécision qui compromette le sort d'un aliéné ou les intérêts sacrés de la justice. La science est assez avancée aujourd'hui pour faire la part de ce qui, dans la généralité des cas, doit être attribué au crime ou à la folie." We entirely agree with this philosophic writer in the claim which he advances for psychological science to distinguish the thefts of the criminal from those of the lunatic *in the generality of cases*. Some cases, however, we think there are, in which the certain knowledge which will alone justify the expression of a positive judgment, can only be attained by waiting for, and watching the progress of events. General paralysis is undoubtedly the form of insanity whose incipient stage is most frequently marked by this tendency to commit theft. We are not prepared to say whether the tendency ever develops itself at a period antecedent to the earliest appearance of physical symptoms. Probably it does, but it is a point which deserves to be carefully observed and noted. We have known a general paralytic undergo a six months' imprisonment for a theft which he had committed, and to be discharged from prison without any suspicion having been excited of the existence of mental disorder. On inquiry, it will, we think, probably be found that in a certain number of cases the mental condition which leads to theft, does antedate any degree of muscular tremor, although it is most common for the state of mind in incipient paralysis which results in theft, to be accompanied by physical signs of disease, which a well-instructed alienist will not be liable to overlook or mistake. The mental condition of general paralytics which leads to theft is peculiar and characteristic. The patients do not seem so much to take the things they steal, because they desire to possess them, as because they believe they belong to them, and because they at the same time have lost the mental power of discriminating circumstances. If lunatics of this class do not steal, very often the first sign of disease which alarms the friends is a reckless expenditure, manifesting itself beyond their means, and outside of their wants. They buy all manner of inconsistent and needless things, paying or running in debt for them, as the case may be. They do this, or they take the things without the formality of paying or promising to pay for them, from the same state of mental exalta-

tion which leads them to believe that the things do or ought to belong to them; a state of exaltation, which will, on careful inquiry, always be found to be accompanied by the failing power of judgment which is the first step towards dementia and fatuity. "I was once able," says the author above quoted, "to establish the non-responsibility of a patient of this kind, who had stolen, in a church, the ornaments, and the most insignificant objects of ceremonial, and who presented no other symptom of disease than a marked state of congestion, great self-content, and a silly laugh; the patient had no delusion, there was only a great intellectual weakness, and the most complete indifference as to the fate which justice would award; only three or four months after his acquittal an attack of acute mania with delirium of grandeur, trembling of the tongue, and other symptoms of progressive paralysis justified my prognostic." Morel, '*Traité des maladies mentales*,' p. 410.

Simple progressive dementia is another form of disease, the early stages of which are apt to be marked by acts of theft, the patients seeming really to have lost the power to recognise the difference between *meum* and *tuum*, and to steal from stupidity. Hysterical mania, or rather mania in hysterical women, is another form of mental disease, which is often marked by propensity to theft even from its earliest stages, and when other and more decided symptoms of insanity are absent such a case may present one of the most difficult problems which it is possible to propose to the medical jurist. Fortunately merely hysterical people are not very liable to commit crime. With all their gusty passion, they are cowardly and circumspect; but some modification of responsibility would be fairly permitted to the loss of control arising from hysteria, although it would not be a less difficult problem than that arising from hypochondriasis. Both of these diseases are near neighbours to insanity, and both of them are liable to run into it. Whether, however, we should call a certain state of mind hysteria or insanity, would not be the real medico-legal question, but whether a certain act was the uncontrollable result of disease or not. The thieving propensities of hysterical maniacs may illustrate and find illustration from the remarkable fact that women during pregnancy are sometimes afflicted with a desire to steal. Gall says, that he knew four such instances in women who had no such propensity at other times. Perhaps it is difficult for a man to bring the faults of woman in her most womanly state to the test of cold unsympathising reason, and on this account the caprices of pregnant women are not unlikely to be judged with mitigated severity. Casper, however, the eminent jurist-physician of Berlin, in his work on legal medicine records the details of a case in which he did not permit himself to be misled by this view of the responsibilities of the weaker sex. We refer to his 204th case, "Theft committed from the pretended caprice of a pregnant woman." Madame de X— had committed thefts in

three goldsmiths' shops during the last three months of her pregnancy. The day after her accouchement she was summoned to appear before the "procureur royal," to the astonishment of her husband, who informed the judge that "she avowed to me, as if awaking out of a dream, that she had had during her pregnancy an irresistible desire to possess shining objects, especially those of new silver. She had in this manner taken objects from the shops in a state of complete dementia. Another time, she assured me that she knew nothing about the matter; and another time, she said, that she had left home with the intention of restoring the articles, but on her way the conviction had come upon her that they were her own property." Madame de X— was said in the depositions to have always been ridiculously vain and coquettish; although, on the other hand, her husband said that she was gentle, quiet, and religious. Much evidence was given to the effect that from the commencement of her pregnancy a change had taken place in her state of mind; she had become absent and careless, and she had manifested the singular desire to possess shining objects; she used to polish copper objects in her house, and play with new money, and she had taken a mother-of-pearl knife and whist markers from the house of one of her relatives, who observed at the time that she was not right in her head. Medical opinions as to her state of mind being contradictory, the case was referred to Casper. He remarked, that although she was said to have besought her husband not to take her to the houses of her friends where there were shining objects, she chose to go herself, and without any necessity, to the shops of the goldsmiths, where she knew that such objects abounded; and, at these shops, instead of simply taking shining objects she paid away silver, and then said she wanted nothing; and she broke up the objects which she stole, in order to render them unrecognisable. She had each time changed the goldsmith's shop where she went to thief, and had concealed her conduct from her husband; and in the interrogations she had made many contradictory and false statements. Casper concluded that the diseased propensity of Madame de X— was not irresistible, that she had not been compelled to commit the three thefts in spite of herself, and that they were criminal actions for which she was responsible. Madame de X— was found guilty. She was separated from her husband, and many years after, and when she was not pregnant, she stole drapery goods from a shop.

In England, or at least in London, Madame de X— would, undoubtedly, have been acquitted, or, more probably, she would not have been arraigned. It appears to be a generally accepted medical opinion that pregnant women are subject to *quasi* diseased states of mind, which are apt to lead them to commit thefts and other criminal acts; but it would not be easy to produce reliable data for this opinion. The exculpatory evidence of a husband in such a case ought to be

received with grave suspicion; indeed, there are plenty of English jurymen who would willingly conclude that a husband's evidence tending to incriminate a pregnant wife was not worthy to be believed.

The opinion of alienist physicians in these dubious cases is worth—well, we will not say what we think it worth. It is at least sometimes heavily paid for. But are we able to produce any definite and reliable information on these cases, the result of unbiassed observation, which is worthy to be accepted by judges of the land as real and true knowledge? Is not our opinion rather the result of the most vague and general impression, founded upon no data which we can produce?

If we attempt to form something like a classification of insane theft, it will be found convenient, and, on the whole, consistent with fact, to distinguish between—1st, theft arising from perverted intelligence, *i. e.* delusion; 2nd, theft arising from defective intelligence, *i. e.* from idiocy, imbecility, and dementia; and, 3rd, theft arising from perverted emotion, as, for example, the caprice of pregnant women, and those cases of supposed irresistible propensity which have been assumed to deserve refuge within the sanctuary limits of mental disease.

About the nature of theft committed under the instigation of insane delusion there can be no doubt. If the law held a man guilty of crime for taking possession of property which he believed to be his own, that belief being the result of insanity, the law itself would be mad.

The nature of thefts of the second category is not always so intelligible. Abstractedly, the nature of a theft committed by a perfect idiot, and by a person of merely weak intelligence is the same. The theft is committed from want of a due appreciation of the character and consequences of the act. Coleridge said that all rogues were fools with a circumbendibus. The question in this case will be the amount of folly. If it is so great as to prevent the thief from recognising the nature and consequences of the act, he must be held innocent of crime; but in this class of cases the question of intelligence, and of consequent responsibility, is one of degree. There must ever be a border-land between sense and folly, in which it will be most difficult to arrive at a right and just judgment.

In the category of insane theft from perverted emotion, our knowledge is all at sea. Whatever we may think of the irresistible nature of thefts by pregnant women, those committed by men and women who are in no exceptional condition of body, and who manifest no other symptoms of insanity than that they steal because they cannot help it, may well be questioned with juridical and scientific severity.

As we have said, a large proportion of the cases of kleptomania, or, as Mathey first called it, klopetomania, which are found in works on insanity, have been copied from one another, the original source

being Gall's great work 'Sur les Fonctions du Cerveau.' Gall, indeed, set the first example of quotation, for he has himself quoted the whole passage in his fourth volume. These are his words, as they first occur at p. 412 of his first volume.

"Exaggerated propensity to Theft: destruction of the moral liberty.

"Victor Amadis the first, King of Sardinia, on all occasions appropriated trifling articles. Saurin, pastor of Geneva, although imbued with the highest powers of reason and of religion, continually succumbed to the desire of thieving. Another individual was, from his earliest years, a prey to this inclination; he entered the army, for the purpose and with the hope of being restrained by the severity of its discipline, but continuing to thief, he was upon the point of being condemned to be hanged. Always striving to overcome his desire, he studied theology, and became a Capuchin. His propensity followed him into the cloister; but as the things he stole were only trifles, he indulged it without disquietude. He took scissors, chandeliers, snuffers, cups, and goblets, and carried them into his cell. A government *employé* at Vienna had the singular mania of stealing only household utensils. He hired two rooms wherein to deposit them; he never sold them, nor made any use of them. The wife of the well-known physician Gaubius had so strong an inclination for thieving, that when she made purchases she always attempted to take something away. The Countesses M—, of Wesel, and J—, of Frankfort, had the same penchant. Madame de N—, had been educated with especial care. Her powers of mind and talents ensured to her a distinguished place in society. But neither her education, nor her rank, exempted her from the irresistible desire to thief. Lavater mentions a medical man who never left the room of his patient without taking something away, and thought no more about it. At night his wife searched his pockets; she found in them keys, scissors, thimbles, knives, spoons, buckles, and needle-cases, and returned them to the proprietors. Moritz, in his 'Traité expérimental sur l'âme,' relates, with all its details, the history of a thief who had so strong a propensity for theft, that being nigh unto death he stole the snuff-box of his confessor. Dr. Bernard, physician to his Majesty the King of Bavaria, tells us of an Alsatian of his acquaintance who committed thefts everywhere and at all times, although he had abundance and was not avaricious. He was educated with care, and his vicious propensity had many times brought its punishment. His father enlisted him as a soldier; this means of correction was of no avail. He stole to a great extent and was condemned to be hanged. The son of a celebrated *savant* offers another memorable example. He was distinguished from his fellow-students by his talents; but from his tenderest years he stole from his parents,

his sister, his servants, his comrades, and his professors. He abstracted the most valuable books from his father's library. All means were tried for the correction of his fault; he became a soldier, he oft-times submitted to rigorous chastisement, but all was unavailing. The conduct of this unhappy young man was in other points exemplary; he did not justify his thefts; but if he was remonstrated with on this subject, whether in a friendly tone or in a more demonstrative manner, he appeared indifferent, and as one who did not regard what was said.

"The almoner of a regiment of Prussian cuirassiers, a man educated and otherwise endowed with moral qualities, had so decided a propensity to steal, that often on parade he took away the handkerchiefs of the officers. His general greatly esteemed him, but as soon as he appeared every article was put away with the greatest care, for he had often carried away handkerchiefs, shirts, and even women's stockings. Afterwards, when asked for the articles he had taken, he returned them in good faith. M. Kneisler, director of the prison at Prague, tells us of the wife of a rich merchant who constantly thieved from her husband in the most dexterous manner. They were obliged to confine her in Bridewell. Scarcely was she free when she again thieved, and was confined a second time. Set at liberty, new thefts condemned her to a third detention of greater length than the preceding ones. She even thieved while in the prison. She had contrived with much cleverness an opening in the stove which heated the room which contained the money-chest of the establishment. The repeated thefts she committed on it were observed; for her detection bells were hung upon the doors and windows, but to no avail, but she was effectually scared by pistols which went off instantly when the money-chest was touched, as to give her no time to retreat by the aperture in the stove. We have seen in the prison of Copenhagen an incorrigible thief, who sometimes distributed his pilferings among the poor. In another place, a thief who was in confinement for the seventh time, assured us, with sorrow, that it seemed impossible for him to do otherwise than thieve. He demanded peremptorily to be kept in prison, and that the authorities should supply him with the means of getting his living.

"It would be easy to cite thousands of like facts, which also serve as proof that the desire of thieving is not always the result of bad education, of laziness, or of poverty, nor the absence of good qualities, nor even of morality or religion; and this is proved from the fact that petty larcenies are overlooked by the world when they are committed by the rich and polished members of society. Absence of mind is the name given to such thefts. But is not the same craving found in the poor man? Does it then change its nature? Is it changed by the value of the things stolen? The result is the

same, and much prudence and experience is needed to decide with exactitude the different degrees of culpability."

But for what purpose has this great mental physiologist adduced these examples of apparently motiveless theft? Not, certainly, as examples of mental disease, since he states his opinion with his customary precision, that these exaggerated propensities are not "true mental alienation, but rather a partial exaltation, a subjection of the soul, offering an incomprehensible contrast between man and the animal which he bears within him. For the flesh lusteth against the spirit and the spirit against the flesh; and these are contrary the one to the other: so that ye cannot do the things that ye would." This he observes on the general subject of exaggerated propensity, but that of theft in particular he appears to have no difficulty in referring to the innate qualities of man's nature. "It is inherent in our nature," he says. "There are very few persons who, with the hand on the heart, can say that they have never committed a theft, especially if they go back to their infancy. In the majority of men it is needful to combat, without ceasing, this propensity to theft, by powerful motives, by penal laws, by religion," &c. Between the propensity as it exists in one man and in another, he observes that "The only difference is one of degree: in one man the propensity is moderated by a happy organization; in another by the influence of education, by the control of habit, or the fear of punishment; but in a third, *the vicious propensity is occasioned by an organ so energetic* that the same motives which have made honest men of others have no influence upon him." Moreover, Gall approves of the legal institutions by which men punish and endeavour to correct this propensity (p. 213, vol. iv); and altogether it would seem that one of the most illogical things which psychological writers have dared to do, has been to cite the examples which Gall has collected to illustrate theft as arising from the preponderating action of an organ in a healthy brain as examples of theft occasioned by mental disease.

With regard to the motiveless nature of some thefts and the singularly incorrigible character of some thieves, Casper makes some remarks which appear both new and true: "The rare cases which Marc refers to, in which the thief throws away the object stolen, or spontaneously proposes to pay for it, admit of physiological explanation. We do not mean by that very common state of perversity and malignity which may be the cause of some thefts of this kind; what we mean is, that so much tact, address, and courage are often needful to commit a theft without being discovered, that it is so needful to watch and to seize the right moment, to plan with care and to execute with promptitude, that one can comprehend the great pleasure which is experienced in overcoming such difficulties, and how much so perilous an enterprise, crowned with success, is flattering

to the self-approbation of the thief. I am convinced, also, that in some individuals a real attraction is felt in this chase after the property of another. I say chase, for I can compare it to nothing better than the passionate desire to follow a hare or a fox at the hazard of life, or to watch for the prey like fishermen in England, who remain whole days on the water patiently watching the least movement of their game. I am thoroughly convinced that this emotion is of much force in holding thieves to their mode of life, and it is in this manner only that we can explain how it is that some of them, after a long imprisonment, immediately recommence to steal, although they well know that a second punishment, more severe than the first, awaits them."

Theft, indeed, while it is by far the most common of crimes, will present, to those who seek for it, a philosophy as interesting as it is important. Let us study it with unprejudiced minds, and not stultify ourselves by wrong-headedly adhering to a narrow professional point of view. The doctors are as willing as *Æsop's* currier to cry out that there is nothing like leather, and the lawyers are just as bad. But neither is all crime insanity nor is all insanity crime. Let us strive, therefore, to distinguish them with all exactness, even though the effort may make our existing ignorance inconveniently apparent; and for the question of kleptomania let us at least decide so far as at once to decline to make science the handmaiden of crime, by firmly insisting upon other evidence of the existence of mental disease than that afforded by the crime itself.

J. C. B.

NOTICES OF BOOKS, PAMPHLETS, &c.

Asylum Reports.

THESE annual visitants which so pleasantly in the spring-time remind one of many a distant friend, contain, it must be confessed, little which is new, and not much which is instructive. No one who has not like ourselves examined year after year the whole series of Asylum Reports, can have any idea of the sameness of their contents. What is said one year in one report, is said the next year in another, and so on; the same facts are stated, the same opinions enunciated, the same entreaties addressed to the local public by one superintendent after another, not from any tendency to imitate or follow each other, but simply because institutions established under the same law and for the same purpose, are liable to encounter the same difficulties, and to have occasion to make the same complaints and to address the same entreaties. Thus we find the superintendents of new asylums complaining to ears, which by old experience we know to be deaf as adders', that patients are sent to them in a hopeless state of bodily disease when asylum care can afford no help, and when their admission can only tend to swell the asylum bills of mortality; and with equal frequency the complaint is made that few of the cases sent to the asylum for treatment are sufficiently recent to be curable. It is discouraging to a superintendent anxious to be widely useful in his calling, and moved with a noble ambition to effect a good per-centage of cures, to admit case after case of chronic mania or hopeless dementia, varied occasionally by an acute case at death's door from delayed treatment and exhaustion. We observe, however, that the old superintendents don't complain of these matters, having found, by dire experience, that it is of little use, and that the main reason after all why patients are sent to the asylum is, that they give trouble out of it, a fact which we claim to attribute to a beneficent law of nature; for if, as an esteemed contributor maintains, it is a law of nature that the insane should be happy and contented under the influences of treatment which tends to their restoration, surely we have a right to name it a law of nature that they are troublesome and dangerous under neglect which tends to their destruction.

This repetition of the same subjects of discussion contained in Asylum Reports is not only unavoidable, but it is essential to their local character and purpose. To reproduce this tautology of subject matter, however, in any attempt to notice the whole series of reports, would be useless and wearisome; we shall therefore endeavour to confine our notice to that which is new or unusual, and in doing so

we commence with a report, which, so far as we know, is not published, except in a local newspaper.

Report of the Gloucester County Asylum.

We observe in the report of the visitors of this asylum to the last Epiphany Sessions, the statement that, "the permission for patients to visit their friends out of the asylum for limited periods, has been extended by the superintendent of late, with apparently very good effects."

In the report of the Visiting Commissioners of Lunacy this novelty in asylum treatment is referred to in the following terms. "The practice of taking the patients beyond the premises for exercise and recreation has been continued and extended, and visits to their friends and relatives are still permitted and encouraged. On these occasions the patients are allowed to wear their own clothes; they also in many instances use them when attending Divine service in the chapel. All these indulgences have evidently a most beneficial effect on the inmates, producing a kindly feeling amongst them, and diminishing the sense of restraint which we find is often engendered by the opposite mode of treatment."

When we read this in the Gloucester newspaper, and felt that it was something new and good, we wrote to our old friend Dr. Williams, who had instituted the practice, to know more about it, and here is what he said in reply:—"Three years ago I commenced the practice of allowing my patients to go out with their friends, and I have gradually extended it up to the present time. In only two instances has the privilege been abused. Last year 400 visits were paid from the establishment, and one patient spent a week with his friends in Somersetshire. As a general rule, the expense is defrayed by the friends, although occasionally I charge it to the institution. I always insist that the person who takes the patient out, undertakes, in writing, to bring him back at a certain time. I also keep a book in which I record every visit, I enclose you one of the leaves."

It must be observed that this sending out of patients to visit their friends is altogether different to allowing patients to be absent on trial under the authority of the visitors, exercised according to the statute. It is, in fact, an exercise of the power of the physician in the treatment of his patient without legal warrant, but just similar to that by which he permits his patients, under proper selection and care, to walk beyond the bounds of the asylum. The letter of the law is, that a superintendent who wilfully permits a patient to escape, is guilty of a misdemeanor; but the spirit of the law is, that a patient is a patient, and not a prisoner, and that in the asylum he is placed under the care and treatment and authority of the superintendent as his physician. In this relation it is evident that any degree of liberty given by a superintendent to a patient with the

intention and purpose of conferring benefit and happiness upon the patient, would come within the scope of the physician's power, so long as he exercised it with sufficient caution and judgment to protect the interests of the public and of the patient; and we can conceive few things better adapted to break any prejudices of the poorer classes against asylums as places of detention, and thoroughly to reconcile inmates of asylums with their detention than this new plan of Dr. Williams. How often may not such a visit to friends be made the useful preliminary to the legal discharge, leading the mind of the patient, without needless shock, to view the struggles and trials of renewed liberty. How often may not the galling doubts of the affection of relatives be removed by such a visit; and above all, in how many cases will not such visits tend to remove from the mind of a patient the feeling that he is shut up against his will and against his interest, and lead him to recognise the benevolent wisdom which secludes him from the world? We have ourselves begun to follow Dr. Williams' excellent example, and we hope and expect to see much good result from it.

The West Riding of York Asylum.

The report contains a large and well-drawn bird's-eye view map of the now completed buildings. This map is the work of a patient, and is an example of what patients can perform under kind and judicious encouragement. The asylum, which is now one of the largest in the kingdom, is somewhat too near to the busy and bustling town of Wakefield, and has a much too limited quantity of land, namely, 64 acres for 1150 patients; otherwise the asylum arrangements would now appear to be excellent and complete. A handsome chapel has been opened during the year, capable of containing 611 persons, and we are pleased to observe that the character of the services is varied to suit different tastes. "The services are about an hour and a quarter in length. They are made as attractive and as little monotonous as possible, by the introduction of music. On the Sunday afternoons there is an excellent choir of about twenty-four voices from among the officers and servants, kindly assisted by several leading members of the choirs of churches in the town. Full choral service, with an anthem, is regularly performed, and the psalms are chanted, usually to simple single chants. In the morning the service is, musically, much plainer, the psalms and versicles being read, and the chants and psalm-tunes being chiefly taken in unison. One of the objects contemplated by the difference between the musical character of the morning and afternoon services, is to endeavour to meet the tastes of those who think chanting the psalms scarcely devotional, and of the still larger population who are soothed and devoutly impressed by good church music."

The Report of the Northampton General Lunatic Asylum,

Contains a statement that women nurses are employed in the men's infirmaries. Mr. Ley of Oxford, we think, was the first to introduce female nurses into his men's wards, though, even before him, we believe that we ourselves had female night-nurses in the men's wards. The practice of introducing female influence on the men's side seems to be in every way commendable, though we are inclined to think that women should not be substituted for men attendants, but be additional helps. Dr. Wing says, "Female influence is about to be brought to bear in another way in the establishment, and in this I am glad to have the sanction of the Commissioners in Lunacy, women having been engaged to nurse the very aged, the helpless, and the sick men. Nursing is the natural province of woman; her superior delicacy and tact are universally acknowledged, and in all our civil hospitals and infirmaries, as well as in many of the military ones also, females are employed to attend the men. A few lunatic asylums have followed the example, with which it is a pleasure to number our own."

Report of the Lunatic Asylum for the North and East Ridings of Yorkshire.

This is always interesting in a financial point of view, for Mr. Hill's reputation as an economist is well known. The accounts, however, are not so clear as could be wished; for instance, although the sum of £693 14s. 9d. has been received for the maintenance of private patients, and the sum of £1816 13s. 1d. has been received for the maintenance of out county patients, it is nowhere stated how much has been charged for the maintenance of each of these patients, and how much in excess of the charge made for paupers chargeable to parishes in the county.

Whatever this excess may be, it would appear that it has been appropriated to the reduction of the maintenance rate, so that Mr. Hill has been able to make so small a charge as 7s. 7d. per week for the county patients, by appropriating this profit on the private and out county patients. There appears no other manner of getting at the cost of each patient in the asylum, except by taking the whole sum of payments (minus the payments made on behalf of the county for additions to the asylum) and dividing this sum by the whole number of patients. The payments were £10,962, and the daily average number of patients 485, and from these data it would appear that the weekly cost of maintenance for each patient in the asylum is 8s. 8 $\frac{1}{4}$ d. We observe that the chairman comments upon the overcrowded state of the asylum, and the early necessity which will arise to apply to quarter session for grants of money to increase the accommodation. Mr. Hill, however, who has private patients in the asylum, who pay nearly £700 a year, expresses the opinion that fuller and

freer access ought to be granted by law for the admission of such patients. He says (though we don't know quite what he means), "Seeing then, that the classes of lunatics above pauperism feed the classes below them, and that this will assuredly go on, so long as that they are only admitted on sufferance to the advantages of county establishments; could the wisdom and humanity of counties also making ample provision for the former be questioned? so that all such, who may choose the care of public institutions, may by right demand it. In my opinion, nothing could be easier to accomplish, nothing more easy to regulate, and nothing less oppressive to the rate-payer, who is constrained to pay for his poorer neighbour, but who in the hour of his own mental affliction incurs the risks and perils of uncertainty. The law at present is permissive, not compulsory; that is, it allows of the reception of others, than paupers, into county asylums, when there is room."

The Report of the Somerset County Lunatic Asylum.

Dr. Boyd's report is always most interesting and valuable, more so indeed to medical men than any other report with which we are acquainted. This, of course, arises from his pathological researches, and the care with which he communicates the results of them to his professional brethren through these reports. The following is Dr. Boyd's *résumé* of his medical treatment:

"The medical treatment has been the same in most respects as described in former reports. In epilepsy the tincture of sumbul has been given in several instances, one female, aged thirty, after taking this drug in drachm doses seven times diluted with water twice a day for about three months, had a cessation of the fits, and she was discharged having been altogether free from fits for six months. In a second case, that of a male mute, who has also taken the same drug, there has been a gradual diminution in frequency, and for the last four months a cessation of the fits. In several other cases, submitted to the same treatment, a minor degree of relief has been afforded. It very seldom happens that any objection is made by the epileptics to taking the sumbul. It has also been given with decided benefit in three cases of neuralgia and in hysteria, and in delirium tremens it has been administered in larger doses, and with good results.

"Cod-liver oil is another remedy which has been very much used during the year in cases of marasmus which are so frequently combined with all forms of insanity. The most remarkable instance in which almost immediate relief appeared to be derived from this oil was that of a female with melancholia, transferred from another asylum with scrofulous swellings and sores in the neck, who was discharged recovered at the end of four months. Two cases where pul-

monary tubercles were suspected have also been benefited by taking the oil, and one male with general paralysis in an emaciated state has become greatly improved in condition, although he has nearly lost the power of utterance. In the latter part of the year there were more cases under treatment of what has been termed general paralysis than at any previous period, twelve males and two females, half the males and both the females in a perfectly helpless state. No treatment has afforded any permanent relief in this disease. In a few instances the bodily condition has been for a time improved after admission by care and attention to diet. The 'Liquor Hydrargyri Bichloridi,' has been given in many cases, and the nape of the neck and spine blistered. Some instances have occurred in which patients in a very helpless state, confined to bed, have rallied for a time after the blistering process has been adopted, combined with rest. It is only in the last stage of this disease that rest can in general be obtained, for previous to it, these patients are very restless, and many of them are not to be kept in bed, but are knocking at the door, and in the day-time constantly undressing themselves. Perfect rest in cases of general paralysis, which I have found so often to depend on inflammation of the spinal cord and membranes, would be most desirable, if it could be obtained, in the earlier stages of the disease. Convulsions or fits, in many respects similar to epileptic fits, have attended some of the cases of general paralysis, especially in the last stage.

"The shower bath has always been more or less used in this institution in cases of excitement, more frequently in summer, and generally with immediate benefit. One man subject to frequent and severe outbreaks of maniacal excitement has it almost daily on those occasions, and has often said it did him good. Another man with dementia, subject to periodical fits of restlessness, also finds relief from it. Two or three of the chronic cases amongst the females also find benefit from its use, and in acute melancholia it has occasionally been decidedly beneficial.

"Packing in the wet sheet has proved of great utility in producing sleep where opiates, given in as large doses as deemed prudent, had failed. It has been tried this year for the first time, after the method witnessed by Dr. Madden, at Boppard on the Rhine. In several instances the relief was immediate: where excitement, restlessness, and want of sleep had continued for several days, resisting all anodynes, they have fallen off in a few minutes in the 'pack,' and although the sleep there has not been of very long continuance in any instance, still the patients afterwards became more manageable and more disposed to sleep."

The Report of the Sussex County Lunatic Asylum.

The report itself contains nothing new beyond a statement of the fact, which our readers will find enlarged upon elsewhere in these pages, that the Roman Bath had proved a valuable therapeutic agent, particularly in cases of melancholia. Forty sailors and marines have been sent by government from Haslar Hospital to the Sussex Asylum. The report contains a full and skilfully-drawn statement of accounts, and we observe that the omissions noticed in the North and East Ridings' Report, do not occur here. The average weekly expenditure for each patient was 10*s.* 8 $\frac{7}{8}$ *d.*; the weekly charge made for patients in non-contributing unions was 14*s.*, and for private patients 16*s.*; the appropriation of so much of these payments as was in excess of cost, enabled the patients from contributing unions to be charged only at the rate of 10*s.* 3*d.* per week. The appropriation of this extra charge upon out county patients and non-contributing boroughs, is a question of much importance. It is one of those things which the statute has left loose; and which has accordingly been dealt with at the pleasure of the visitors of the different asylums. In Sussex and in York we see it dealt with to reduce the maintenance rate, and no doubt this is the usual mode of its appropriation; but in other counties it has been maintained that this charge is really a rent-charge for the use of the building, and ought therefore to be appropriated to the maintenance of the building. In this manner it has been appropriated in the Somerset Asylum, and we are pleased to remark in the report of that asylum, that the visitors give Dr. Boyd the credit for having economically increased the accommodation of the asylum by 50 per cent., mainly through the appropriation of this charge made upon his patients. In the asylum from which we write, there are 142 patients from non-contributing boroughs, each of whom pays a rent-charge of 3*s.* 6*d.* a week, a payment which amounts to the important aggregate of £1292 4*s.* per annum. This also has been appropriated as a building fund, that is, to pay for the additions, improvements, and repairs, which would otherwise be paid for out of the county rate. If, however, it were appropriated to reduce the payments for maintenance of the 500 patients chargeable to parishes in the county, the reduction so effected would be at the rate of about 1*s.* a week per head.

It is to be regretted that no attempt has been made to regulate this matter by law, for not only does its present condition prevent any just comparison being made of the economy of management in different county asylums, but it is a matter which if left thus loose, is liable to give rise to contending opinion. Not only has the right appropriation of this money not been determined, but the persons have not been indicated who have the right to dispose of it in any

manner; and the question consequently arises, and has been mooted from the county whence we write, whether the visitors of the asylum have any power to use this money in any way, or whether it ought not to be disposed of by the justices in quarter sessions.

A short time since, moreover, a bill was introduced into parliament with clauses to compel the visitors of county asylums to provide accommodation for patients from non-contributing boroughs for which, of course, fair payment was to be made. This payment would be nothing more than the rent-charge of which we are speaking; and surely if there is any probability that such contracts with boroughs will be made compulsory upon the visitors of county asylums, the appropriation of such funds should not be left undetermined, as in the present rather slovenly omission of the statute.

Upon Dr. Robertson's own report will follow well the *Report of the Provincial Hospital for the Insane at Halifax, Nova Scotia*, because the establishment of this institution has had to be reorganised, and the superintendent, Dr. De Wolfe, says that the reorganization has been effected upon the principles laid down by Dr. Robertson in the pages of this journal.

"In re-organising, reference was made to the views of Miss Dix, as propounded to the superintendent, as well as to the mode adopted at one of the new English asylums, namely, that at Hayward's Heath, Sussex, opened 25th July, 1859. The superintendent of the Sussex Asylum, C. Lockhart Robertson, Esq., M.D. Cantab., is entitled to every consideration, as well from his position as Honorary Secretary to the Association of Medical Officers of Asylums and Hospitals for the Insane, as from his experience in the specialty.

"In a descriptive notice of the new Sussex Asylum, in the 'Journal of Mental Science' for April, 1860, the duties and position of the officers, &c., of the establishment are minutely set forth. These formed a basis for the plan adopted here, corresponding as they do with the views of Dr. Conolly and Dr. Kirkbride, than whom no higher authorities on the subject are to be found in England or America."

Under the head of elopements, escapes as we should say, Dr. De Wolfe gives an account of the effect produced by one patient upon many others, which is fortunately a difficulty not often met with in institutions for the insane.

"In the autumn a pyromaniac, a young man of highly prepossessing appearance, was committed, who found the confinement irksome and intolerable. He not only avowed his intention of making his escape at all hazards, but preached to others the doctrine that they were not rightfully confined here, that they ought to be at liberty, and that if freedom were not granted they ought to take it. In three weeks he instilled his belief into several other patients, and persuaded them to elope, himself setting the example.

"Having no suitable enclosure, no barrier indeed to prevent escapes,

and but few attendants, it is not to be wondered at that one patient went as far as Mount Thom, one to Lawrence-town, one to Hammonds Plains, one to Preston, two to Dartmouth, one to Newport, and another to Windsor Road. With a single exception, all were overtaken and brought back, and the epidemic appears to have subsided."

It has been pleasant to remark, from the paragraph in the Halifax report above quoted, that the pages of this journal sometimes carry instruction to remote parts of the world; it is by no means the first time that we have had the gratification of being assured of this fact. We indeed receive the strongest assurances from the colonies of the high estimation in which the governors and superintendents of asylums hold the information conveyed to them by this journal, and of which, in their inability to avail themselves of more direct means of information on asylum management, they stand much in need.

Report of the Cheshire County Asylum.

This asylum, containing 365 patients, has been enlarged so as to afford accommodation for 510 patients, the full amount of which, however, the visitors hope will not be wanted for eight or ten years to come. To employ the unoccupied portion of the building usefully and profitably, they are determined to take in private patients at the rate of fourteen shillings a week. Mr. Brushfield, the medical superintendent, remarks on the gradual decrease of the curable patients who are admitted into the asylum, which he attributes to the gradual increase of aged and broken down cases which are admitted. We observe that he, as well as several other superintendents, are in expectation that the clause in the new poor-law removal act, which imposes the cost of pauper lunatics upon the common fund of unions, instead of on the parishes where they have settlements, will operate by inducing the local authorities to send cases of insanity to the asylum in an early and curable stage of disease. We are inclined to think that if the clause does operate in this manner it will also have the effect of inducing the local authorities to press upon asylums many chronic cases of aged persons who would otherwise receive relief in union houses, or in their own homes. An octogenarian pauper, in the second childhood of old age, so long as his condition is looked upon as the natural result of senile decay, will receive relief from the funds of his parish; but if the overseers can make out that he is a lunatic, and obtain his admission into the asylum, they will shift the charge of maintaining him from their own local rates to the general fund of the union. Those who are best acquainted with the motives under which overseers and guardians generally determine to act, will be able to foretell whether there will now be no tendency to press patients into the asylum, not for the sake of any benefit they may receive there, but with the penny-wise motive of saving the parish rates. We by

no means object to this clause in the poor removal Act, and, indeed, we think it a just and good one, and one which, fairly carried into execution, will work well; but the tendency to work it, in the manner we have pointed out, will require to be carefully watched.

Report of the Lunatic Asylum for Salop and Montgomery.

Dr. Oliver mentions that in this asylum the power of the visitors to grant allowances to patients out on trial, under the seventy-ninth section of the Asylums Act, has been largely resorted to, and with the best effects. He says that 236 patients have at various times been sent out on trial, most of whom have been assisted by the allowance ordered by the visitors. In only forty-one of these cases has the experiment failed; by which we suppose Dr. Oliver to mean that in only this number of cases, patients, who have been sent out a month on trial, have not been able to remain out permanently. A difficulty has, however, unfortunately arisen which threatens to prevent the continuance of Dr. Oliver's practice of putting in force the powers of this seventy-ninth section. He says that the parish authorities have up to a late period made no objection to the payment of money for the relief of patients going out of the asylum on trial, but that recently they have asserted that no money can be legally advanced for this purpose beyond the first week's instalment, except an officer of the asylum shall assume the office of relieving officer, and pay the allowance to the patient or his friends every week during the period of the patient's experimental absence from the asylum, which is usually four weeks.

Dr. Oliver does not tell us whether, up to the present time, the parish authorities have themselves consented to be the medium through which the payment should be made, and that their objection would, therefore, mainly apply to the medium, and not to the period of the payment. We think they would be so far right, and that the proper person to make the payment is undoubtedly an officer of the asylum. But there is nothing in the act to say that the payment shall be made every week or every month. We remember an instance in our asylum, in which a recovered patient, who had got his livelihood by teaching, was maintained out of the asylum on trial for three months, during which he gathered pupils and self-confidence, and has supported himself ever since, whereas, if left without aid, he would probably by this time have become a chronic lunatic. In his case he appeared in person, and received his allowance once a month, and we have no doubt the visitors of an asylum have the full power to make an advance of this kind for a month, or for any other period which they may think right; the words of the act being, "It shall be lawful for such visitors to make such allowance to such last-mentioned person, not exceeding what would be the charge for such per-

son if in the asylum, which allowance, and no greater sum, shall be charged for him, and be payable as if he were actually in the asylum." There is nothing about paying the allowance every week here, and the only responsibility incurred by paying once a month would seem to be, that if the patient should spend the month's allowance during the first week, and become destitute, or if he should die, and his friends not refund the allowance, the union might decline to pay, and the asylum have to bear the loss. Of course the words quoted above, "shall be charged for him, and be payable as if he were actually in the asylum," mean that the sum shall be charged to the parish or union, and be payable by the parish or union to the treasurer of the asylum; and we can see no reason why the powers given by the act to enforce payment when it is refused, would not apply here as much as to the maintenance of the patient in the asylum, and therefore we cannot agree with Dr. Oliver in his opinion that the Lunacy Act gives no power to the visitors to enforce payment of this allowance.

This matter is important under other aspects than the one under which it is viewed by Dr. Oliver. In the Devon Asylum, for instance, a certain number of patients are always out on trial, living with cottagers in the neighbourhood, with a view of affording one means of relief to the over-crowded asylum. Some of these patients have been out on trial for several years, the asylum paying all charges, and in turn charging the parishes for their care and maintenance as if they were in the asylum. Now and then a parish has objected to the arrangement, and has requested that the patient may be sent home, and sometimes the visitors have acceded to the request, and sometimes have refused, being guided by the opinion they formed as to the probability of the patient being properly taken care of when at home. The payments for these patients are made monthly.

Report of the Lancashire Asylum at Rainhill.

The power of making the allowance to patients on trial appears also to have been freely used by the visitors of this asylum. Dr. Rogers says—"The clause in the Act of Parliament by which patients may be discharged on trial, and an allowance made to them during their period of probation, has been largely applied during the past year; and many have been thus discharged much earlier than it would have been thought prudent to do unconditionally. The period has, in one or two instances, been extended to a second month; and in two cases (both women), reports of their condition and conduct when at large not being satisfactory, their final discharge was withheld, and they still remain under treatment in the asylum."

It would appear, therefore, that in some asylums this allowance to patients on trial is freely granted, while in others benevolent funds have been established to effect the same end; thus in the next report which we take up, namely, that of—

The Essex County Asylum.

Dr. Campbell states:—"During the past twelve months, fifty-four of the patients who were in poor circumstances, on leaving the asylum received assistance from the Benevolent Fund, established for the relief of the destitute insane, on their discharge; and I beg respectfully again to press on the attention of the public the necessity of a more liberal support to a charity, the benefits of which cannot be estimated in removing one of the most common occasions of relapses, namely, the difficulty which such persons, when first liberated, frequently have in procuring employment, and the anxiety and hardships to which this difficulty must subject them, and which must operate with more than usual severity in the then delicately balanced state of their nervous system."

There appears to be, and there can be no question that, in a considerable number of pauper patients convalescing from disease in an asylum, the cure is confirmed and relapse prevented, by pecuniary help afforded on the first exit from the asylum; but, as we have seen, the manner in which this help is given, differs in different asylums. We shall not attempt to determine which of the two is preferable; whether it is better for the visitors to put in force the powers of the statute, and thus to tax property at large in the county for the purpose; or whether it is better to establish a voluntary fund, and in this manner to tax only the liberal and benevolent. As a rule, perhaps it is better not to resort to individual benevolence to raise funds for any purpose provided for by the laws of the land. The fact of its having been so provided for may be taken to intimate that the benefit contemplated is a general one, and, as there are so many worthy objects of charity which are not so provided for, it would seem undesirable to run the risk of diverting contributions from them for an object for which all the real property of the land is taxable.

Report of the Royal Edinburgh Asylum for the Insane.

Dr. Skae's report is enriched by the description of a few interesting cases, drawn with much vigour. In one of these, a case of suicidal impulse, associated with persistent watchfulness which defied narcotics, after describing the ingenious attempts to evade the vigilance of the attendants and procure some means of self-destruction, Dr. Skae says that the patient became tranquil and slept at night when mechanical restraint was imposed by means of the "polka." What is the polka? "When she saw there was no chance of effecting her purpose she slept quietly. Again and again

she was tried without it, but she never slept when she thus had the slightest opportunity of obeying her morbid impulse. This was one of the few cases where restraint not only gave additional safety but was positively beneficial."

In the table of causes of disease in patients admitted it is worthy of remark that only eighteen out of three hundred cases are attributed to intemperance, and Dr. Skae comments upon the diminishing frequency of this cause in his admissions; this year it being less than 7 per cent., whereas ten years ago it was the assigned cause in 20 to 25 per cent. of the cases admitted. It is to be hoped that the reason of this difference is the diminished frequency of intemperance as a cause. Dr. Skae's remarks on the benefit of extending the protection of the asylum, for a sufficient period, to convalescent patients, are so important, that we shall quote them at length. Unfortunately the public asylums are usually so crowded with patients that convalescent patients have little chance of being retained in them for the time that is necessary to consolidate their cure.

"After a residence of ten or twelve months, the prospects of recovery diminish very rapidly; while, on the other hand, of the cases removed after a very short residence, a considerable number relapse. One female, who was convalescent from an attack of puerperal mania, was twice removed prematurely by her husband, and twice brought back by him, having relapsed almost immediately on returning home to the associations connected with the first invasion of her malady. On both occasions she threatened to kill her husband. The great importance, in a vast number of cases, of change of scene, to avoid such associations when a recovered patient is removed, cannot be over-estimated. In connection with the risks of early removals in cases of recovery or convalescence, I think it right here to record my conviction, contrary to a common prejudice, that prolonged detention of a convalescent patient in an asylum may tend to bring back the disease, I have never seen any case to justify such an opinion. On the contrary, I think the exercise of self-control, self-denial, and patience, by a prudent delay, are generally most beneficial, and tend greatly to confirm the cure. I have had many occasions to regret, most deeply, the too early removal of convalescent patients. I do not remember one instance in which I had any reason to regret the prolonged residence of a convalescent case. On the contrary, I have in several instances been afterwards thanked by the patients themselves for having recommended their detention; and in several other cases I have been told by the patients afterwards that they were sent away too soon, and that they continued to labour under their morbid impulses and delusions for some time after they had left my care, and had succeeded in concealing them from every one but themselves."

Report of the Crichton Royal Institution for Lunatics.

Dr. Gilchrist, referring to some cases in which recovery took place in contradiction to the probabilities of prognosis, and in which he attributes the happy result to the skill and assiduity of his medical assistant, in adapting the moral treatment to the minds of the particular case, observes :

“These and other examples tend to confirm our strong faith in what may be denominated the individualization of moral treatment, that is, its special adaptation to individual cases, its application being aided by the exercise of authority and influence. It has been, and continues to be our firm belief, that this principle lies at the bottom of all improvement and success in the moral treatment of insanity. It is a principle, however, entirely ignored in the increased and increasing tendency to amplify our already overgrown establishments, where the power of wielding that authority, and exercising that influence, is reduced to a minimum.”

Eighteen patients were admitted into the institution in whom the cause of the insanity was referred to the revival excitements, but of these only one case was admitted into the private asylum and seventeen into the pauper department; a fact indicating how greatly the revival movement preponderates in the lower classes of society. Of these eighteen cases seven were maniacal, ten were melancholic, and one had acute dementia. In nine of them suicidal impulse was present. A large proportion of them refused food, and in three artificial alimentation had to be resorted to for a long time. The tendency to excitement of the sexual feelings was very marked in a large proportion of the cases. It was remarkable that only two of the cases were received from the town of Dumfries, the very focus of the revival excitement, a fact which Dr. Gilchrist thinks “mainly due to the care and prudence exercised by the leaders of the movement.” After all we have heard, it is reassuring to find that care and prudence can be exercised by leaders of the revival movement. The results of treatment of these eighteen revival cases were as follows :—seven were cured, three were removed by friends (of whom two were improved), of the remainder one is convalescent, one has passed into chronic dementia, one into persisting mania, and five continue in a state of melancholia, but in three of these five the result is still uncertain.

Report of County Asylums for Monmouth, Hereford, Brecon, Radnor.

Dr. M'Cullough notices a fact which we also have had occasion to observe, that the supposed immunity of women from general paralysis appears to be contradicted by recent experience :

“The mortality during the past year, though only about an average, was nearly two per cent. greater than in the previous year. The increase was amongst the females, and the cause was chiefly general paralysis; the very unusual number of seven having died from that disease, which is comparatively infrequent in women.”

Are the habits of women approximating more nearly to those of men, so as to render them more equally liable to this fatal disease?

Report of the Lincolnshire County Lunatic Asylum.

We are sorry to observe that this model institution is suffering from the chronic disease of asylums, that is, from the inward plethora which oppresses the respiration and stagnates the circulation. The wards are overcrowded, and parts of the asylum are used for dormitories, for which they were not intended and are ill adapted. The Commissioners have recommended that a new chapel should be erected, the present chapel used as a dining-hall, and four rooms now used as dining rooms be converted into dormitories: a very good plan for killing three birds with one stone.

Report of the Devon County Lunatic Asylum.

In this the Superintendent comments upon the deaths which occur in asylums from phthisis, as a kind of health-gauge or hygienometer of the institution. He says :

“The number of patients who die of phthisis is always a source of peculiar anxiety, inasmuch as the development of this disease may be regarded as a test of the sanitary conditions of the institution. Some of the patients who are carried off by it are indeed admitted with the disease already developed, and sometimes far advanced; others are admitted with the seeds of the disease in the constitution, which the progress of time would under any circumstances bring to maturity. But, in a certain number of cases, patients long resident in an asylum pass from a state of good bodily health into one of tubercular degeneration, from influences which they experience, but from which they ought to be guarded during the time that they are emphatically placed under medical care and treatment; of these influences, the bad air of overcrowded dormitories is unquestionably the most potent, and although it is one from which the poor do not escape in their own close and narrow sleeping rooms, it

is yet an anti-hygienic condition to which the patients in an hospital ought never to be exposed. An overcrowded condition of an asylum, which is an hospital for the insane, is the worst possible condition in which it can be placed both for the physical and moral welfare of its inmates. But in addition to this cause of consumption acting directly upon the body, there is one which may act upon it through the mind, namely, the influence of a monotonous and cheerless existence, which a long continued residence within the walls of an asylum is apt to become to patients of a certain mental constitution; not only, therefore, are efforts made to relieve the monotony of a forced detention for the saks of those patients whose malady admits the reception of curative influences, but also for the sake of the hopelessly insane, ought proper efforts to be made to stimulate the flagging interest, and to give colour to a dreary life."

(To be continued in our next.)

Roll of the Royal College of Physicians of London.

By WILLIAM MUNK, M.D. Longmans.

THESE two handsome and ably written volumes are, as the learned author says, an attempt to supply a complete series of the fellows, licentiates, and extra-licentiates of the college from its foundation, in the tenth year of Henry the Eighth, to the passing of the Medical Act, in the twenty-second year of the reign of Victoria. Of course the series contains the names of many worthy and useful men in their day, the mute and inglorious record of whose existence now is only marked by a date; but of more eminent men Dr. Munk gives a brief biographical sketch, in which the leading incidents of life and traits of character are drawn with scholarly skill, and gentlemanly feeling, qualifications which were, indeed, essential to an author who should be able to draw up a record of our professional predecessors, in which their frequent and not very dignified quarrels could be presented in a manner devoid of all offence to the present standard of good taste.

The study and treatment of mental disease as a distinct branch of medicine is of so recent a date, that we cannot expect Dr. Munk's roll to contain the names of men who would be specially interesting to us as psychologists. There were, however, some physicians of the college upon whom the medical care of institutions for the insane devolved; such was Dr. Thomas Allen, admitted a Fellow of the College of Physicians in 1671. "Dr. Allen (says the author) was physician to Bethlem Hospital, and to his credit let it be recorded, that he refused to accede to a proposition, which had met with general approbation at the Royal Society, to make the first experiment of the transfusion of blood in this country, "upon some mad person in Bedlam."

Dr. Edward Tyson made a fellow of the college in 1683, was also a physician of Bethlem, and a very able and estimable man. In Garth's dispensary, however, where he figures under the pseudonym of Carus, the unscrupulous satirist lashes at his lunatic practice in the following manner :

“ In his chill veins the sluggish puddle flows,
And loads with lazy fogs his sable brows ;
Legions of lunatics about him press,
His province is lost Reason to redress.
So, when perfumes their fragrant scent give o'er,
Nought can their odour like a jakes restore.”

In later days we find the eccentric and learned Dr. Battie, fellow of the college in 1738; he was physician to St. Luke's Hospital, and proprietor of a large private asylum, and his practice, says Dr. Munk, seems to have been limited almost exclusively to insanity. In his treatise on madness, he censured the practice formerly pursued at Bethlem, and was answered and severely animadverted upon by Dr. John Monro, the son of Dr. James Monro, who was the first of the Monro's who flourished at Bethlem, and who accompanied his father to England nearly two hundred years ago. Dr. Munk gives a quotation from Dr. John Monro's pamphlet in vindication of his father against Dr. Battie, to the effect, that insanity is a disease the treatment of which can only be empirical, and cannot be made the subject of lectures; an opinion which may perhaps confirm the college in its practice of requiring no study or knowledge of insanity from candidates for its license; although it is somewhat in opposition to the fact that the College of Physicians has itself of late years listened to more than one series of excellent lectures on this subject. “He was a man (says Dr. John Monro, speaking of his father) of admirable discernment, and treated this disease (insanity) with an address that will not soon be equalled. He knew very well that the management requisite for it was never to be learned but by observation; he was honest and sincere; and though no man was more communicative upon points of real use, he never thought of reading lectures upon a subject that can be understood no otherwise than by personal observation.”

Our space forbids further reference to the pages of these interesting volumes, for which not only the College of Physicians, but the medical profession, are under obligation to Dr. Munk, as a valuable biographical record of the members of its most eminent corporation.

Des Hallucinations, ou Histoire Raisonnée des Apparitions, des Visions, des Songes, de l'Extase, des Rêves, du Magnetism, et du Somnambulism. Par A. Brierre de Boismont, M.D., &c., &c., &c. Troisième édition. Paris, 1861.

THIS new edition of the work of our illustrious and learned colleague is so greatly enlarged and improved, that it may almost be considered a new publication. It is a work which ought to be carefully studied by every alienist physician, for those chapters which relate more particularly to the hallucinations of the insane and which form the most scientific parts of the work, are invaluable; and although they may lack some of the interest which attaches itself to other parts of the volume in which the historical hallucinations of priests and prophets, or the romantic hallucinations of lovers and poets are recited with the elegant simplicity of style which is so fascinating in the writings of this author, still, as he is at least as experienced as he is learned, and as the knowledge of hallucinations derived from his experience of mental disease comes to us fresh and first-hand, and is of positive and unquestioned value to those whose duty it is to observe and to treat mental disease, we feel that we are justified in placing a far higher estimate upon the scientific than we do upon what may be called the historical part of the work.

With regard, indeed, to the historical part of this work, it is difficult for us to see the facts recorded from quite the same point of view as that which M. Brierre de Boismont sometimes takes, because he appears to believe in supernatural phenomena and we do not. This belief in the supernatural, which is visible in the author's pages, is neither concealed nor assumed; it is an honest and avowed belief, similar to that which is entertained by many great men; it is, however, one in which we cannot for a moment concur. In an early page of his work the author says of supernaturalism that it is a great belief in which he emphatically avows his sympathy; but to us supernaturalism is an absurdity; if it exists, it exists not for us, as colour exists not for the blind, nor sound for the deaf. We believe in only one supernatural existence, namely, in the personal and individual Power which made nature. We believe in the book of nature, and in its one Author; in the world, and in God. But as for the supernatural, the spirit-world of sights and sounds, the whole tribe of apparitions, the whole chime of ghostly voices, we believe that they can, one and all of them, be explained upon the principles of physical or of metaphysical law. A large number of them are pure and simple fictions; others, intended only at first as an expression of imaginative thought, have been mistaken for realities; others again have been neither more nor less than the expressions of partial insanity.

In the mist of forgetfulness and error which disguises from our eyes any clear and distinct appreciation of the realities of the past, it has been but too easy to attribute the conduct of great men which we cannot explain, either to supernatural agencies or to mental disease, which if we were able to see it clear and close at hand we should be able to recognise as merely some imaginative peculiarity of action or expression. The demon of Socrates, the nymph of Numa, may have been nothing more than poetical expressions for modes of thought. We may illustrate what we mean by expressions which we once heard fall from the lips of the most popular religious orator of the day. We were listening to a sermon which Mr. Spurgeon, who was preaching from the text "Wist ye not that I must be about my Father's business?" After having with much force of language interrogated the different classes of his audience as to whether they were habitually engaged in their Father's business, he suddenly turned the interrogatory upon himself, and we heard him express himself in words to the following effect, which impressed themselves deeply upon our attention and memory:—"And I, when I have been sitting in my study arm-chair of an evening, in my thoughts elaborating a sermon, and may be elaborating the spirit out of it, often from the dark side of the room I have seen a hand in threatening attitude extended towards me, and often from the obscurity I have heard a voice saying unto me—"Art thou about thy Father's business?" Now we understood no more from this, and we do not believe Mr. Spurgeon meant us to understand more from it, than a rhetorical expression of the conscious feeling that he was not employing his time to the best advantage. But how easy it would be, in fact how inevitable it would be, that such a figure of speech should be interpreted into the emphatic and public confession that he, Mr. Spurgeon, was the subject of hallucinations; and how many hallucinations of men who are in the habit of expressing themselves with rhetorical vehemence, the stock hallucinations of history, may have been at the time nothing more than figures of speech, like this of Mr. Spurgeon's? When the devil appeared to Luther, for instance, and he threw his ink-bottle at him, may it not have been a figurative expression of the manner in which he rebuked the spirit of evil by the ink which so copiously flowed from his eloquent pen? But in addition to that class of historic hallucinations which are but the lies of false priests, the hallucinations of the Eleucinian mysteries for example, and in addition, to the historic hallucinations which are but mistaken conceptions of figures of speech, there have been no doubt a large number of partial madmen who have impressed their real hallucinations upon the history of the world. We cannot agree with M. Brierre de Boismont in the opinion that the hallucinations of the insane are easily to be distinguished from those which have been experienced by the founders of religious systems and creeds, when he says, p. 97, "As for

the analogy which some allege to exist between hallucinated persons and the founders of religious creeds, the distinction is always to be made; in the hallucinated man that force of will, that logic of reason, that fixed purpose are not to be found which belong to men who have a providential mission. The hallucinated man is inflamed by certain religious ideas to which he subjects himself, he can neither lead, nor promote, nor develop them, but allows himself to be led in tow by them, or rather to be absorbed by them. The man of genius masters the idea, directs it; and makes it fructify, while the insane man has no power over it; it follows him as his shadow and he obeys all its caprices; the one is a king, the other a slave." He adds, "Among the large number of hallucinated persons whom we have observed for more than twenty years, we have always found that alongside of the consequential reasoning which appears the result of the idea, some incoherent word or some extraordinary act, that is to say, the grain of insanity occurs." We cannot think that this line is always to be drawn with such facility as our author appears to think. Suppose we grant, for the sake of argument, that Mahomet was a man of genius who made his ideas, which appeared like hallucination, bear the fruit of success, and that he was no more hallucinated than Napoleon was when he talked of the star of Austerlitz. What shall we say of Joe Smith, who has also been the successful founder of a religious system? Was he also a man of sound mind and of commanding genius? What shall we say of Edward Irving, the priest and prophet of an enthusiastic sect? What, above all, shall we say of Johanna Southcote, the lunatic old woman, the nature of whose writings the Master of the Rolls has within these few weeks been called upon to study and to judge? The great lawyer did not allow the blasphemous nature of Johanna's hallucinations to prevent him from deciding that her character was eminently pious, and her writings obviously intended to promote religious feeling, and on this ground he refused to disannul the validity of a will, by which property was bequeathed for the purpose of extending the circulation of her prophecies.

In our author's strictly scientific chapters; that is to say, in those in which he treats of hallucination as a symptom of, and a part of insanity, he adopts the excellent method of summing up at the end of the chapter the conclusions at which he has arrived; thus, in the fourth chapter on hallucinations of insanity in the state of simplicity, he sums up the conclusions arrived at as follows:

"In hallucinations insane of themselves, the actions are almost always consequent upon morbid sensations, so profound is the conviction of the lunatic in their reality; hallucinations of hearing are the most common, and may be estimated at two thirds of the others; enfeeblement or deprivation of the sense of hearing is no obstacle to their production, this characteristic distinguishing them

from illusions; most commonly hallucinations of hearing seem to come from without, but sometimes they have their seat in the interior of the body; they may be combined with hallucinations of sight, and less frequently with those of the other senses; to hallucinations of sight, less numerous than the above, and those which most attract the attention to them, must be referred the curious fact of visions; the beholders of visions have always played an important part in history, these hallucinations being nothing more than the coloured reflections of habitual thought may be infinitely varied, and may take as many forms as there are individuals; their production does not depend upon the integrity of the sense of sight, since blind men have been affected by them. Hallucinated men believe that they can see into the interior of their body, a tendency which is observed also in animal-magnetised persons and in somnambulists. Hallucinations of sight are often associated with those of hearing, and their concurrence may result in very remarkable facts. Hallucinations of touch are less easy to recognise than the above, because they are often confounded with nervous pains and visceral illusions, well observed facts proving this beyond doubt. Hallucinations of smell and of taste come after those above mentioned, in order of frequency; those of smell may be observed at the commencement of all kinds of insanity, these hallucinations are scarcely ever isolated, they are combined with the others, and above all with illusions. Hallucinations without complication are rare, almost always they are united to one of the forms of insanity."

On the subject of general hallucinations, in which most frequently, our author says, it is needful to comprise the union of hallucinations and illusions of all the senses, he arrives at the metaphysical conclusion that, general hallucinations will afford a powerful argument in favour of Berkleyism, if a pathological condition may serve to establish a psychological principle. On this point we would beg to observe that the proof of Berkleyism would be of no value unless the hallucinations were not only general as regards the senses, but as regards the objects of sense, that they had in fact supplanted all real perceptions of the real world; a pathological state the existence of which we have never heard of or read of. We do not understand how a single hallucination affecting all the senses, how, for instance, the hallucination of a fire which the patient hears and sees, and smells and feels, can have any validity in proving that there is no world but the world of ideas, while in addition to the unreal object of his hallucination the patient perceives through all his senses the reality of the material universe.

The frequency of hallucinations and illusions in the different forms of insanity has been studied by our author in 1146 cases, in 725 of which he found that they existed according to the relative frequency exhibited in the following table:

Form of Insanity.	Number of Cases observed.	Number in which Hallucinations and Illusions were present.
Acute delirium	32	25
Mania	229	178
Monomania of fear (Lypemania)	303	248
Hypochondriacal monomania	63	43
Simple melancholia	1	0
Stupor.....	6	2
Monomania of sadness with stupor	7	3
Monomania.....	34	29
Dementia	82	41
General paralysis	147	37
Weakness of mind, imbecility, idiocy	53	17
Alcoholic insanity	73	49
Hysterical insanity	14	9
Epileptic insanity.....	28	9
Puerperal insanity	23	18
Alternating insanity (folie à double form)	27	14
Moral insanity	5	1
Insanity	19	12
	1146	725

We regret that the limited space at our command forbids our analysing the able chapters of the work in which the psychological and the physiological aspects of the subject are exhausted. These, and the chapter on the etiology, and that on the medico-legal relations of hallucination, are written with the fulness of information and breadth of view which characterise the experienced and philosophical author. The work is in every way an admirable production.

The Statistics of Insanity.

THE Commissioners in Lunacy frequently give to their very able reports some distinguishing feature, and in their last report this feature was statistical. The appendix contains a continuation of the statistical tables given in the eighth report, and comprises the statistics of England and Wales for five years, ending with 1858. The tables show a vast increase of pauper patients in asylums, namely, 7222 in the ten years ending January 1st, 1861, and this is accompanied by the remarkable fact that there has not been any increase in the number of registered private patients during the same period. There has, indeed, been an increase of private patients in the hospitals for the insane to the extent of about 207 in the ten years, but this increase has been counterbalanced by a corresponding decrease in the private patients of licensed houses, so that the result is the stationary position of the number of private patients throughout the country.

The first important deduction from their tables upon which the Commissioners remark, is one which adds a new and valuable illustration of the well-known importance of early treatment in insanity. In direct

proportion as patients are submitted to early treatment, they are susceptible of cure; and in direct proportion as they are withheld from early treatment, they are liable to become incurable and irreclaimable burdens upon the resources of the community. Of 1000 patients admitted into asylums the duration of whose disease did not exceed one month, at the end of three years 509 in 1000 had been discharged recovered, 155 had been discharged relieved or not improved, 178 had died, and 153 were remaining in the asylums. Contrast with these figures the results of treatment of 1000 patients admitted into asylums after they had been insane six years and upwards, of these only 50 recovered, 173 died, and 633 were remaining in the asylums, the other 124 we presume were discharged, not recovered. The commissioners found this result of experience upon what may be called a statistical law. "The recoveries decrease with the increase of the duration of the attack at the time of coming under treatment," and the operation of this law, coupled with the fact stated by the Commissioners that comparatively few recent cases are admitted into asylums, has resulted in the ever-increasing accumulation of chronic and incurable cases.

Looking at this question of the curability or incurability of patients solely as an affair of the pocket, the statement cannot be too often repeated to the guardians of the poor, who are practically the persons in authority over the insane poor, that if they send cases to the asylum on the first outbreak of the malady, at the end of three years only 153 per 1000 will remain as a charge upon the poor's rate, whereas if they defer to send patients to the asylum until six years have intervened after the outbreak of the malady before the resort to asylum care and treatment is made, 633 per 1000 will remain a weighty and burdensome argument against the impolicy of delay.

The Commissioners, we think very properly, lay but little stress upon the fact that there has been no augmentation of private patients in asylums. The number of private patients in asylums bears so indefinite and unknown a proportion to the number of insane persons in the rank of life from which private patients are drawn, that it would be rash to found any argument relating to the increase or decrease of insanity upon such imperfect and fallacious data. Our own personal observations and enquiries have led us to the conviction that not a moiety of the insane of the upper or middle classess of society are registered in the books of the commissioners, either as private patients in asylums, or as single patients kept for profit; and it is a subject of grave importance in these enquiries to ascertain the extent to which, in a still lower rank of the community, the custom of detaining the insane at their own homes, tends to vitiate our statistics of the insane in questions relating to the increase or decrease of the malady. How is it that so few recent cases are admitted into our public asylums, that, as the Commissioners point out, the increased duration of life of in-

curable cases due to good treatment in detaining patients from the grave, so completely outweighs the influence of improved methods of treatment in effecting the discharge of patients by cure, as continually to silt up our largest institutions? Something of this must no doubt be attributed to the short-sighted parsimony of the guardians of the poor, who have been but too willing to defer as long as possible the evil day when an insane pauper will cost the parish eight or nine shillings a week in hard money; something also must be set down in many counties to the difficulties of procuring asylum care and treatment where the asylum accommodation is inadequate to the demand made upon it; but a still larger share of this lamentable result must, we are sure, be attributed to a great fact hitherto overlooked in the statistics of the pauper insane, namely, that the admission of a pauper into an asylum is in a very large class of instances not the direct result of his insanity, but the result of his poverty. He has been maintained out of the asylum, and beyond the reach of the Commissioners' registration, either upon his own means or upon those of his friends, until under the impoverishing influence of his malady these means have become exhausted, when he is admitted into the county asylum, and for the first time comes under official cognizance an old-established and incurable case of lunacy. This is, without doubt, the most potent cause of the lamentable fact that comparatively few recent cases are admitted into our county asylums; and it is the consideration of circumstances constantly bringing this cause under our notice, which makes us hesitate to give full credence to the public statistics of the insane in this country, as sufficient data whereon to found any reliable conclusions respecting the proportion of the insane to the population.

In view of the general bearing of their statistics the Commissioners arrive at two wide conclusions of a satisfactory and comforting nature. The first is, that they believe them to afford "abundant reason for discrediting the statements which foreign authors have founded on our returns, to the effect that the inhabitants of this country are more liable to insanity than those of any other civilized state." The second is, "that we have not found any reasons supporting the opinion generally entertained, that the community are more subject than formerly to attacks of insanity." With regard to the first of these conclusions, the Commissioners evidently go on strong grounds, inasmuch as they demonstrate that a very large proportion of registered lunatics is due to the operation of the law intrusted to their administration, whereby the existence of lunacy, at least in the pauper class of the community, is accurately registered.

In countries where there is no constituted authority, or a very limited one, over the insane members of the community, they cannot even be counted, much less protected; and it is clear that no comparison can be drawn between the proportion of lunatics to the population in countries placed in altogether different circum-

stances for facility of registration. But it must be remembered that there are some civilized countries in which the registration of lunatics is as perfect as it is in our own. This is certainly the case in Holland and we are inclined to think that it is also so in France. The statistics of the insane of the latter country published once in nine years, are a perfect model of careful and scientific arrangement. In these statistics it is to be remarked that the number of the large class of unregistered lunatics who escape the computation of our Commissioners is by some means or other obtained, and forms a most important element in the result. In the enumeration of the insane in France in 1851, there were altogether 44·970, or one in 796 of the population of the country; of these 20·537, or 45·68 per cent. of the whole number were in asylums for the insane or general hospitals, waiting for their transference to an asylum, and 24433 lunatics, or 54·23 per cent. were living at home (*a domicile*) a number which the reporters think would be still further increased but for the lamentable prejudice so injurious to the insane, which leads families to conceal the existence of their insane members.

The reporters remark on this fact that there are a greater number of insane living at home than in asylums, "although it is probable that the larger proportion of the insane living at home belong to the class of harmless lunatics, yet in relation to public health and safety a considerable amount of danger exists in such a state of things."

The reporters give tables showing the number of the insane who are living at home in twenty of the departments, and the proportion which this number bears to the population. At the head of this table is the department of Vosges, containing 516 lunatics living at home, or 121 in 100,000 of the population. At the foot of the table is the department of the Seine, containing 169 lunatics living at home, or 12 in 100,000 of the population. As might have been expected, the six departments which contain the largest number of the insane living at home are devoid of asylum accommodation; while out of the ten departments containing the smallest amount of insane living at home, eight have the advantage of possessing an asylum. This result, that the departments without asylum accommodation (*où il n'existe aucun établissement consacré au traitement de l'aliénation mentale*) are those in which there are the greatest number of insane living at home, is more completely proved by the following table, which shows at a glance the position of the insane in this respect in all the departments of France:

	Population in 1851.	Lunatics living at home.	Proportion to 100,000 of the Population.
In the 25 departments without asylums	8,908,923	7,225	73·24
In the 61 departments which have asylums	26,874,226	17,208	64·03
Total	35,783,170	24,433	68·28

The reporters inquire whether the figures of this table “do not prove that the real cause of the continued increase of persons admitted into asylums is to be found less in the progress of the disease, than in the creation of the asylums themselves, which, in receiving each year an increasing number of patients, have the effect of gradually diminishing the relative number of the insane who were before time taken care of in their families.”

The Commissioners in Lunacy for Scotland, in their third report, also take cognizance of the insane living at home, or as they put it, living in private houses. Thus it appears that there are in Scotland 8084 lunatics, of whom 2632 are in public asylums 852 are in private asylums, 866 are in poor-houses, and 3734 are in private houses. Of this number of patients who are in private houses 1877 are private patients, and 1847 are pauper patients. In Scotland as in England the number of private patients has diminished while the number of pauper patients has increased and the Scotch commissioners point to a very obvious cause for this. “This result is probably in great measure due to the transfer of a number of the indigent insane from the class of private patients to that of paupers.” We do not observe any reference in the English report to this explanation of the fact that the establishment of a system of public asylums is accompanied by this transference of patients to the pauper class; yet every county asylum in England contains no inconsiderable number of patients who in the olden times would have been found as private patients in the large low-class asylums which were formerly the substitutes for public institutions; and many of these patients, even at the present time, although nominally paupers, are in reality private patients, inasmuch as the cost of their maintenance, sometimes the whole of it, though more often in part only is defrayed by their friends through the intervention of private arrangements made with parochial officers.

The Commissioners' report gives the number of pauper patients in private houses as 5980, of whom 785 were in lodgings or boarded out, and 5195 were living with relations. The corresponding number of private patients, however, who are on the books of the Commissioners as living in private houses, being those only who are returned as single patients kept for profit, is 118. The discrepancy of this number for the whole of England and Wales when compared with the number of private patients known to live in private houses in Scotland, namely, 1887, shews how essential it will be to institute an enquiry on a larger base, as a test of the prevalence of insanity in the population. We should expect to find a much smaller proportion of the insane of the middle classes living at their own homes in Scotland than in England, because the former country has in its excellent middle-class asylums long been in the possession of asylum accommodation for the insane of small means, of which this

country is loudly proclaimed to be greatly in need. But notwithstanding the existence of the middle-class asylums of Scotland we still find 1887 private patients who are known to reside out of asylums. Now if we take the population of England and Wales as about seven times greater than that of Scotland, there ought to be 13,209 insane persons not paupers living out of asylums in this country, instead of the 118 recorded as doing so in the books of the Commissioners in Lunacy; an enormous mass of unrecorded insanity which must vitiate any general statistical conclusions founded on the numbers of the insane who are registered and counted as the inmates of asylums. These unrecorded cases will explain the much greater proportion of insanity in Scotland to that which is known to exist in this country, since the 8084 lunatics in Scotland would, on the above estimate of the relative populations of the two countries, correspond to 56,588 in England and Wales. It is indeed a subject of regret that effort was not made through the instrumentality of the census to gain some knowledge of the amount of insanity in the country. In referring, however to the elaborately accurate report of the Massachusetts commission, we find that even a house to house visitation of census officers, may be ineffectual to obtain this knowledge. The Massachusetts commission obtained, by means of the medical profession, the accurate information that in 1852 there were in the State 3719 idiots and lunatics. Six years before this enumeration was taken, a State commission had been issued for the same purpose, which commission made its enquiries through the municipal authorities. This inquiry resulted in the enumeration of only 1512 insane persons, of whom 1156 were paupers, and only 291 able to furnish the means for their own support. This enumeration was tolerably correct respecting the number and condition of the pauper insane of whom the municipal authorities could have direct information, but it was evidently most incomplete in the enumeration of the insane who were living at home and supported on their own property or by their friends. Again, only two years before Dr. Jervis's commission the officers of the national census were by law directed to ascertain the number of the insane by house to house visitation, and they discovered only 2471 insane and idiots. "It is probable" says Dr. Jervis "that many of the families refused or neglected to report to these officers the insane that were within their households." The large proportion of independent lunatics enumerated by Dr. Jervis's own commission shows to what an extent such a refusal would vitiate the correctness of these statistical returns, for of 1110 lunatics having property no fewer than 716 were found to be residing at home.

The success of the commission worked by Dr. Jervis, in obtaining a full and accurate account of all the insane persons in the State, was gained, as we have said, mainly through the instrumentality of

the medical practitioners. Country clergymen, overseers of the poor, superintendents of asylums, &c., gave their quota of information, but the mass of it was obtained by the medical men who worked willingly and systematically, comparing notes with each other so as neither to omit nor to repeat the enumeration of any case; and so unanimous were they in the work, that of 1319 physicians in the State all except four made reports to the commissioners.

The second conclusion which the Commissioners have drawn from their statistics is that reasons are wanting for the support of the opinion that insanity is on the increase; and this conclusion appears mainly to be founded on the satisfactory reasons they have been enabled to afford for the great increase of pauper lunatics, namely:

“1st. The large number of cases previously unreported and only recently brought under observation.

“2nd. The increased number of lunatics sent to asylums.

“3rd. The prolongation of their life when thus brought under care.”

The manner in which the operation of the county asylum system brings to light the existence of the insane among the poor, is singularly illustrated by a comparison of the proportion of the insane paupers to the amount of the pauper population in those districts, which do, and those which do not, possess asylums. “Thus in two contiguous districts in South Wales, nearly equal in population, the one (without an asylum) which has a large excess of paupers receiving relief, has at the same time a considerably smaller number of paupers under care.” The boroughs of Maidstone and Canterbury afford a similar instance; Maidstone, which has asylum accommodation, has nearly double the number of insane paupers to Canterbury, which has no asylum accommodation. This result is partly no doubt owing to the rapidity with which neglected pauper lunatics disembarass the poor’s rate by dying off, but by far the greater part of the difference is owing to the lunatic poor of the unprovided districts not being counted as lunatics. There are no doubt just as many persons who become insane in these districts as in the others, but about half of them are not recognised as insane, or they do not receive relief as such. The special relief wanted, that of the asylum, cannot be obtained, and therefore no relief is demanded.

It would be a strong argument in favour of the opinion that insanity is not increasing with what is called civilization, if it could be established that the number of the insane in the upper classes of the community has not increased. As we have said, the returns of the Commissioners show that their number in asylums has not increased, but this certainly does not conclusively tend to prove that the increase in the number of the pauper patients cannot be attributed to social or other causes which would operate with even greater force upon the upper classes; since the number of the upper classes who are in asylums is no test of the number

of these classes who are insane. But must we then believe that the great increase of the pauper insane is fully explained by their more complete registration, and by their increased duration of life? Pauperism has decreased during the last ten years, by 20 per cent., and moreover, as the Commissioners remark, "We are unable to discover any material changes in the social condition of the labouring population rendering them more prone to mental disease." On the contrary, we may say that the changes in the condition of the labouring population tends quite the other way; the people are better fed, better clothed, and better housed; there is less drunkenness, there is less moral excitement; no epidemic incendiarism, no widespread discontent, no reform-bill agitation, no corn-law agitation; political fanaticism defunct; religious fanaticism in a rapid decline; and yet, in ten years, here is an increase of pauper lunatics from fourteen to twenty-two thousand. We must acknowledge that we have much difficulty in repressing the belief that insanity in the community at large is on the increase. The sthenic diseases which struck down our hardy fathers have disappeared; the lancet rusts in its case, and the free-handed use of opium and brandy has replaced the tartar-emetic and the calomel of our youth. Such an atonic constitution of disease, accompanied by an increased liability to nervous excitement and depression, would be an amply sufficient cause of the increased prevalence of insanity. What is the cause of the cause, or what is the mode of influence of the habits of civilisation in the production of this atonic and nervous constitution of disease, is a subject worthy of most diligent inquiry. We cannot believe that this is an age in which "wealth accumulates and men decay," but we do firmly believe that men are not constitutionally what they were before the time of the cholera and influenza epidemics, when Christendom was not only muscular, but vascular.

The Fourth Annual Report of the Commissioners for Scotland contains a statement, supported by a statistical table, which opens up a new view of the occurrence and existence of insanity:—"But it would appear, from the following table, that the occurrence of lunacy is considerably more frequent in urban than in rural districts. We here use the term occurrence in contradistinction to that of existence. For it by no means follows that the number of lunatics should be greatest where most cases of lunacy occur. It may happen, for instance, that in a district in which comparatively few cases occur, a greater number of lunatics will remain at the end of a fixed period than in another district in which lunacy is of much more frequent occurrence; and the explanation of this fact will probably be found in the greater proportion of recoveries and deaths which takes place among the patients of the latter district. With the view of elucidating this point, we have contrasted the number of pauper lunatics intimated from town and rural districts, and we find that in the

former the occurrence of pauper lunacy, as compared with its occurrence in the latter, is as 100 to 54, whereas the proportion of existing pauper lunatics at 1st January, 1861, in the corresponding districts, was as 100 to 106. We have regarded as urban those parishes containing towns, or parts of towns, having more than 20,000 inhabitants, and as rural all other parishes." (p. xxxiii.)

The Commissioners think that some portion of the remarkable fact, that the occurrence of insanity in the town population of Scotland is nearly as two to one to its occurrence in the rural districts, is to be explained by the officers of town parishes admitting the insane into the lunatic wards of workhouses, discharging them therefrom, and admitting the same cases again, with a facility which does not occur in asylums supplied by rural districts. After deducting somewhat, however, for this influence on the accuracy of the town returns, a large part of the difference must still remain. That with so great a difference as to the occurrence of insanity, the existing amount of insanity between the two kinds of population should be so nearly equalised, is a remarkable and suggestive fact, suggesting, as the Commissioners indicate, that mental disease in the town is more fatal or more curable than in the country. The impressions left upon us by our own experience of these two classes of the insane would entirely concur with this view; the inquiry, however, deserves to be carefully and thoroughly pursued as to the prevalence of different causes and different forms of insanity, and its different results in town and country; and it is quite possible that such an inquiry may throw light upon the apparent increase of insanity in the community in connection with one of the most remarkable tendencies of society in this country and in this our age, as indicated by census returns; namely, that the increase of the population of the country at large has taken place in the towns, and that the rural population is stationary. The true value of statistics as a branch of science is to give us the means of foreseeing events, so that we may resist the tendencies to evil, and promote the good; and it is just possible that in the course of time the skeleton forms of the statistics of insanity which we now possess may be so filled up that we may be truly able to estimate the force of the influences which tend to the production of this dread scourge of our race. As an instance of the deeper foundations of statistics, take the influence of the Earl of Shaftesbury, who has signed the report which has served as a test for these remarks. In the discharge of his duties as the Chairman of the Commission in Lunacy, he has undoubtedly done more than any one else to leave his mark upon the statistics of the insane, both by promoting the influences tending to their cure and diminishing those tending to their injury, and by establishing an accurate record of all official facts bearing upon the movement of their numbers; but a more profound statistic than we at present possess

might, and very probably would, demonstrate that something else which his lordship has done has had far more influence than all the above upon the statistics of the insane. The Act of Parliament in which the voice of humanity made itself heard as law, forbidding that the youthful promise of our town populations should be ruined in health in that greed of gain which would use up the springs of life of factory children with as little remorse as fuel is supplied to the untiring machine which animates the mill; this must have had a profound effect in preventing the causation of insanity, to estimate which we must be in the possession of quite another kind of statistics to any which we now have. Our readers will not mistake us to mean that any large number of factory children would be likely to become insane from the simple effect of fatigue. But the secondary effect of the exhaustion of the vital powers at a time when children are growing into men and women, the secondary effect upon the causation of insanity resulting from an enfeebled stock of men and women, whose nervous system had been strained to the utmost in early youth and subjected to unnatural stimulus that it might bear the strain, must have been fearful. When we think of the physiological effects of men and women so used up in youth becoming the parents of a race, we get an idea of the manner in which an insane population might be produced. All our knowledge tends to convince us that the seeds of insanity are sterile unless they fall in fruitful ground, and that the immediate causes are unimportant compared with those wider influences which we call primary. Take a healthy boy and girl, of healthy parents, and supposing such a devilish experiment possible, you would find that you could scarcely succeed in inflicting insanity upon them by any amount of vice, misery, or wretchedness. But after the experiment, let these children breed, and you will produce a crop of madmen and idiots. We must look for the most potent causes of insanity a generation at least beforehand.

The Social Science Review.

Numbers 1 and 2.—We welcome this new paper, for which there is undoubtedly a place in the thick crowd of periodical literature, if only it is so conducted as to fill the want which is felt for some organ to bind together the *disjecta membra* of what is called social science. The contents of the two numbers which have been issued are valuable and interesting, although we fear that the method proposed of dealing with the subject-matter of social science in articles which are never to exceed three columns in length, and which are always to be complete in themselves, that is, to admit of no continuation in future numbers, that such a plan, however well adapted it may be to store the bricks and mortar of information will leave no scope for the design of any temple of science, no, not even for a portico. The promoters of the

'Social Science Review,' appear to have imitated the method of the Social Science Association, which, in limiting the papers to be read at their meetings to a delivery of twenty minutes, have adopted the surest means of providing themselves with an interminable supply of shallow talk on every possible variety of subject which can be supposed to influence the welfare of the human individual. Now, society reduced to its most elementary condition cannot be less than the society of man and woman, or that of man, woman, and offspring; and any question not involving the relations of human beings towards each other in some state of society, which may be thus narrow, may be a question of science, but it cannot be a question of social science. Social science, as it was understood by Auguste Comte, who first investigated its laws and who gave it a name, was meant to be the comprehensive survey of all other sciences as they affect society. His scheme for the new science was grand and vast, though it was vague and obscure; but we may well doubt whether since he has left us, any progress has been made in the development of his idea. His thought, which was a noble generalisation, which it might take ages to work into the definite formulæ of knowledge, has been succeeded by the day of small things, in which three columns of a newspaper, or twenty minutes of an address, are thought to suffice for subjects embracing the most intricate problems which can be propounded to man's intellect. Social science, as we take it, is, in the first place, the investigation of the laws of nature as they relate to man, in his relation to his fellow-men; in illustration we would say, that the causation and treatment of disease is not a question of social science unless the disease is capable of being occasioned by one human being's influence upon another. In the second place we would say, that social science exists only in the relation of other sciences to each other; thus, we would say that neither the science of jurisprudence nor that of medicine, nor any other penfold of knowledge taken separately, deserves the name of social science; and going further even than these artificial divisions in our knowledge of the laws of nature, it would perhaps even be true to say that neither the physical sciences nor the moral sciences can alone be considered to constitute social science. It is the mixed and interchanging action of all law as it affects human society which can alone be considered the science of society, and it is this broad generalisation of all science as it affects society which appears to have been so strangely overlooked in the promoters of the so-called social science of our day. We trust that the able men who have commenced the 'Social Science Review' will keep themselves free from the service of the rag and bone collectors of social science; or if they do take these rags of science under their notice, that they will reduce them into pulp and expand them into paper, and write upon them the great and noble generalisations of true philosophy.

The Scotch Lunacy Bill.

The Lord Advocate having withdrawn the objectionable clauses in this bill, by which the present able and distinguished Commissioners of Lunacy for Scotland would have been reduced to the position of inspectors of asylums, under the control of a board of lawyer commissioners, there is little now remaining in the bill to comment upon, unless it is that the constitution of the board of commissioners for only two years very needlessly imposes a limit of duration which will tend greatly to weaken the power and authority of the board.

When the condition of the lunatic poor in Scotland first became known to the public, it might be wise, in the surprise and novelty of the situation, to pass an Act constituting a Scotch Board of Lunacy for a limited time. This mode of legislating, however, has been attended with evil effects of a grave nature, inasmuch as the persons upon whom the duty fell of erecting pauper lunatic asylums in certain parts of the country knew that if they could postpone the discharge of this duty for a certain time it could not be imposed upon them until a new Act of Parliament had been passed; and these persons unwilling to raise the funds for the erection of asylums for pauper lunatics, instead of discharging their own plain and simple duties, have in fact thought fit to raise an agitation against a new lease of power being granted to those who have authority over them in the matter. The English Board of Lunacy is constituted with no limit in point of time, and no such encouragement is offered to agitate against its authority, which would, undoubtedly, be given if it were the creation of a biennial Act of Parliament.

In passing through committee of the House of Commons, Mr. Blackburn unsuccessfully divided the house on the sixth clause, which appears to have been expressly framed to check-mate the procrastinating tendencies of the gentlemen who are appointed to build asylums, and who don't like to do it. The clause enacts that when a district board fails to provide the requisite asylum accommodation, the Secretary of State may authorise the commissioners to apply to the Court of Session to appoint a person to perform the duties of the district board relative to the provision of such accommodation. Mr. Blackburn thought it was unfair to override all the counties by this clause, because a few of them had neglected their duty; not permitting himself to perceive that it would only apply to such counties as did neglect their duty.

J. C. B.

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"In adopting our title of the 'Journal of Mental Science,' published by authority of 'The Association of Medical Officers of Asylums and Hospitals for the Insane,' we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health or to produce mental disease, are not less questions of mental science in its practical, that is, in its sociological, point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say, that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains, immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the 'Journal of Mental Science,' although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."

J. C. BUCKNILL.

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VOL. VIII.

OFFICIAL REPORT.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE.

AGENDA FOR THE ANNUAL MEETING

HELD AT

THE ROYAL COLLEGE OF PHYSICIANS, PAUL MALL EAST,

On THURSDAY, the 3rd of JULY, 1862.

At 12 noon. The Committee of Management meet at the Royal College of Physicians.

At 1 p.m. Annual General Meeting of the Association at the Royal College of Physicians.

1. Dr. Lalor will resign the chair to Dr. Kirkman, the President-Elect.

2. Dr. Kirkman's address from the chair.

3. Receive the report of the Treasurer.

4. Election of President (and place of meeting) for 1863.

5. Annual election of officers, viz., Treasurer, Editor of the Journal, General Secretary, Secretaries for Scotland and Ireland, two Auditors.

6. Election of new members.

7. The following communications will be read :—

a. "On the Cottage Asylum System," by Dr. Mundy, of Moravia.

b. "On Middle-class Hospitals for the Insane," by Dr. Maudsley.

c. "On Modes of Death among the Insane," by Dr. Bucknill.

d. "On the Special Utilization of Asylum Sewage," by Dr.

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Robertson (with a ground plan of eighteen acres of meadow land thus irrigated at the Sussex Lunatic Asylum).

8. Mr. John Warwick's resolution.
9. Dr. Flynn's resolutions.
10. Dr. Burnett, on The Red Hill Asylum.

REPORT OF PROCEEDINGS

At the Annual Meeting held at the Royal College of Physicians, on Thursday, July 3rd, 1862.

DR. KIRKMAN, M.S., Suffolk County Asylum, *President*.

There was the largest attendance of members that has ever met. The following (*among others whose names were not left with the Secretary*) were present. Dr. Kirkman, *President*; Professor Czermak, of Prague, the originator of the laryngoscope, Dr. Herz, Assistant-Surgeon to the Imperial Hospital in Vienna, Dr. Alex. Lumniczer, Chief Surgeon of St. Rochus' Hospital in Pesth, Hungary, Dr. Markusovszki, from Pesth, Editor of the 'Medical Weekly Journal of Hungary,' Dr. Bucknill, Dr. Caleb Williams, Dr. Paul, Dr. Harrington Tuke, Dr. Wood, Dr. Monro, Dr. D. Mackintosh, Dr. S. Newington, Dr. Ross, Dr. T. B. Christie, Dr. Andrew Wynter, Dr. Gustavus Symes, Dr. Campbell, John Warwick, Esq., Dr. Davey, Dr. R. H. H. Sankey, Dr. Fayrer, Dr. Sibbald, Dr. Mundy, (Moravia), H. H. Stewart, Esq., Dr. Corsellis, Dr. Wing, Dr. Sheppard, Dr. Brushfield, Dr. Gilchrist, Dr. Rorie, Dr. Lowry, Dr. Boyd, Dr. Burnett, E. Toller, Esq., Dr. Maudsley, Dr. Eastwood, H. Jacobs, Esq., Dr. Robertson, W. M. Hollis, Esq., J. P., Dr. Webster, Dr. Salmon (Maleno Asylum, Sweden), Dr. Brown, Bloomingdale Asylum, New York, Dr. Edward Hart Viven, Dr. Llewellyn Williams, Mr. King, C. E. (142 High Holborn), James Hewart, Esq., Belfast; Dr. Clouston, G. G. Gardiner, Esq., &c. &c.

Dr. Robertson, the Secretary, read the following letter from Dr. Lalor resigning the chair to Dr. Kirkman:

RICHMOND DISTRICT LUNATIC ASYLUM,
DUBLIN; June 26, 1862.

MY DEAR DR. ROBERTSON,—A question regarding increased hospital accommodation for the insane in this district, which is of the deepest importance to the institution, has just arisen, for consideration in different quarters here, which will require my constant presence at home for some time, so that I find my hopes of being at your meeting on the 3rd July, disappointed, just at the last moment.

It is indeed a deep disappointment to me that I cannot personally have the pleasure of repeating the expression of my heartfelt thanks to the members of the association, for the high and unmerited honour to which they raised me, at the same time that I resigned that honour into the worthier hands of my successor, Dr. Kirkman.

It would have been also a source of great gratification to me to have had an opportunity of personally expressing at the meeting, the obligation which in common with the other Irish Resident Medical Superintendents, I owe to the association, and to our Irish Chief Secretary, Sir Robert Peel for the improvement which has been inaugurated in our position, by the new rules for the Management of District Lunatic Asylums in Ireland. This improvement in our position, for which we are so largely indebted to the kind support of Sir Robert Peel, and of the association, is valued by us, as we believe, it was recommended to him, and to the association, for no other reason more highly than for the opportunity it affords us of bettering the condition of the institutions in our charge, an opportunity of which I trust, we will temperately, judiciously, and perseveringly avail ourselves. Thus, as I am convinced, can we best prove to Sir Robert Peel and to the association, the sincerity and the extent of our gratitude.

With sincere and warm thanks, with many earnest wishes for the continued prosperity of the association, and with fond hopes of meeting the members at many future meetings (and at no distant period again in Ireland), I now beg through you to resign the Presidential chair which I shall ever feel it a source of pride and honour to have held.

Your very much obliged,
JOSEPH LALOR, M.D., &c.

To D. C. L. ROBERTSON, M.D.,
Hayward's Heath Asylum, Sussex.

PRESIDENT'S ADDRESS.

Dr. Kirkman then took the chair and read the following address :

GENTLEMEN,—Your kindness has placed me upon a very giddy height, and it is to the continuance of that kindness that I must look to uphold me lest I fall. When I call to mind the previous occupants of this chair—men honoured in science, and the very echo of whose names still ennoble that branch which we cultivate, and for whose prosperity we devote every energy and effort, I may well solicit your indulgence as I ask for your support. If any department wherein medical science and art are blended, can claim the high privilege of proposing to itself, the great end of humanity and the search after those means by which God permits this end to be approached, it is the delicate investigation of Psychology, and if those who engage in it, do so, in the spirit of my talented predecessors in this chair, they will be led to acknowledge the true theory of life, as tenanted in this temporary structure, that mode in which God himself manifests his wisdom.

It may be observed with submission, that even in the sacred science of theology, assertion and dogmatism are too often substituted for

investigation and proof. But we would not have it so in psychological inquiry, we would remember one universal law of organization and life, that the more refined the more exquisite the organization the higher the faculties are; and, consequently, the greater our responsibilities. We would not attempt in the slightest degree to sever this peculiar branch of the practice of medicine from the full exercise of the higher morality. Psychological science forms a broader portion of the foundation of ethics, than some may be disposed to admit, or than has ever yet been duly acknowledged by the moralist; but in proof of it, it will be enough for me to point to the honoured authorities I have already referred to, some of whom we are permitted to claim as adorning our own ranks; professors of bright intellect illuminating whatever truths or facts they have been illuminated by; but concentrating all upon the cause of a class long unnoticed and almost unknown, and are still identifying themselves with sufferings not their own, and devoting a toilsome and an anxious life to the benefit, the health, the restoration, and the happiness, of the insane generally, and especially of the insane poor.

I am old enough, gentlemen, to remember the origin of this association, existing at first only in a small volunteer band, urged on by the energetic labours of Dr. Hitch. I can revert in pleasing recollection to its more organized arrangements, and its augmented numbers from our meeting at Oxford (with the liberal encouragement of Mr. Ley); and in marking its progressive growth, from the days of its peripatetic youth, widening its area, before it deepened its roots into "a local habitation and a name." I cannot but congratulate every officer and every member on the influence that the association now exerts, and the rank that it holds among the nations. Our bands are now strengthened by increasing numbers of foreign associates, and we esteem the presence of these gentlemen among us, and appreciate their value, while we assure them that our houses are free for their inspection, and with our hands and from our hearts we shall cordially welcome them.

As the vast concurrence of all peoples and tongues, rational and irrational, causes us to meet once again in London, I cannot but be reminded of our earliest visits, as an associate body, to Hanwell, at the time of its mighty strides in ameliorating the treatment of the insane, when the feeble sporadic efforts in the counties were fortified by electrical connection with the great centre of commendation and of praise. Nor can I resist a reference to Bethlehem Hospital, with its present philanthropic revolutionist, without pausing for a moment aptly to solicit the attention to those splendid memorials graven on stone, by the father of Colley Cibber, of mistaken views and practice, which stand in the hall, and as he looks upon the fettered limbs of the maniac, and the petrified melancholia of Cromwell's servant, without dwelling unpleasantly on the comparisons

between 1662 and 1862, just to trace his own contrast between "Now and then." Here is indeed a bicentenary worth celebrating, now the old chains of ignorance and cruelty are melted for ever in the fires of knowledge and of love. The false theory and practice of the past are carved in stone, because they belong no longer to the flesh; the sculpture of the present is on the living tablet of the brain itself.

"Ring out old shapes of foul disease,
Ring *out* a slowly dying cause,
And ancient forms of party strife;
Ring *in* the nobler modes of life,
With sweeter manners, purer laws."

While we meet, then, in order to focus the teachings of prolonged experience, and the light of psychological science, and to take a prospective view of the many important steps yet before us, we cannot forget those honoured members who have ceased to instruct and to cheer us. Each year deplores the loss of living thinkers, although it is enriched with the legacies of their thought. It is because of those who are gone, and have left their records with us, that we are able to repeat as to one science, what Lord Bacon said of all, "Now is the true antiquity." But especially ours is no region where the wave of deep grief has not travelled for the loss of the Prince Consort. Having laid the first stone of the Medical Benevolent College on the foundation of his own name, and given promise of far more varied assistance in the future, our mournful tribute to his memory is not to be estimated by or dissolved into quantity of utterance, but fixed in intense regret that a thousand chains, and our own not the least, have lost their integrity by this one royal link which has been snapped.

Though the past and the present give full confidence in the future, the shadows of that future are not altogether free from unsightly appearances. The uncertain state of our lunacy laws still calls for the closest attention of every member of the association, but we may confidently look to those of our body who are anxiously watching the course of events, with the assurance that they will not let slip any valuable propositions, or fail to condemn whatever may present itself of a perplexing, or an antagonistic character. It seems as if legal opponents were resolved to take arms against medical authority, and to suppress if not altogether to reject medical evidence on medical cases alone. Our law courts, in some of their strange vagaries, seem disposed to deal with lunacy as a purely legal idea, and even the Lord Chancellor's bill appears to be based upon the principle that lunacy is not a medical question, but irrespectively of the physiological fact, a question of equity or law. We may well take up the distinction which somewhat ludicrous declares that law is not equity, and equity is not law, but while neither disputing upon legal technicalities, or attempting to decide upon legal questions, we lay ex-

clusive claims to the ability of answering our own. We earnestly, zealously, and conscientiously protest against that "hazy legislation," as expressed by Dr. Mayo, which would hazardously interfere in purely medical questions and encroach upon the full prerogative of medical men to judge of mental sanity. Such legislation must be as an instrument edged with evil, and it cannot by any legal dexterity be tempered into good. At the late Social Science Congress, Mr. Palmer, the secretary of the Law Amendment Society, is reported to have said that no less than eight acts of parliament must now be studied to understand the law as applicable to the courts presided over by Sir Cresswell Cresswell, and he asks whether anything could more clearly show the empiricism of our legislative proceedings. I thank that gentleman for the term, because I am sure that we can show something that does evidence empiricism more clearly when we point to men who would decide upon medical questions without having received a medical education. This is really empiricism, and it strikes at the very root of every correct, of every safe decision. The empiric taking it on this authority as a medico-legal term, may gain sometimes, we admit, very great public confidence, and an accidental result will strike the public mind as forcibly and often more so, than one arrived at by the true principles of induction from facts and premises adequately estimated, even where nothing but those principles could avail. It is the more needful to remember this, because some men, whose services have raised them high in public esteem, have not thought it beneath them to endeavour to lower and metamorphose the psychologist into the mad doctor, and to treat his devotedness with sarcasm and contempt. Such ridicule is both undeserved and misapplied, and if the delusion went no farther one might be content to bear it; but when we are met with the preposterous supposition that lawyers, who are ignorant of anatomy and physiology, and more particularly of the symptomatology of disease, and of those abnormal changes which are constantly taking place within the cranium, long before there is any outward evidence of insanity or intellectual aberration, are to be the judges whether a patient is of sound mind or not, we must reject their assumption altogether. Is it possible (we would ask) for any other than medical men to trace the course of the "sly treacherous miner working in the dark," to recognise the tremor of the upper lip, the hesitation of speech, the inability to pronounce the consonants, the tripping of the foot, and the irritable temper as incipient symptoms of general paralysis? Whereas the psychological physician would have his suspicions aroused at the appearance of the first symptom, however slight, and his diagnosis and prognosis pronounced long before the appearance of any delusion, long before that which is the great and sole guide of non-professional opinion. As far as all human knowledge extends at present, it is generally supposed, that whatever the case

may be morally, intellectually at any rate the mind cannot be sick. If diseased mind cannot exist apart from diseased matter, how can those attempt to give an opinion upon the former, who are ignorant of the changes which characterise the latter. If the high legal authorities should go back, and take part with the ancient Greek empirics, who contended that an investigation of obscure causes and natural actions was fruitless, because nature was incomprehensible, we can only say in reply, with old Celsus, "that as pains and various kinds of diseases arise in internal parts, no one can apply remedies to these who are ignorant of them." Let us still trust, however, that the legislature will not sanction such anomalies as these, and that we may look with confidence to the anticipative appointment of the Chancery Commissioners as correctors of much that we feel to be almost intolerable in the examination of medical witnesses. The physician should be called, not as the advocate or the witness for any particular party, but be as unfettered and unbiassed in his opinion as the members of the jury. He should be allowed to question witnesses, and give his opinion upon the evidence before him. This would tend to check many of those unguarded expressions which keep up a morbid feeling in the public mind. At the late monster case, whose records "frightened the whole isle from its propriety" for four-and-thirty days, the stain of insanity was a term in frequent use; an epithet which stained the phraseology of those who ought to know better.

This leads me to observe generally that the functions of the psychological physician are becoming every year more widely diffused, and more intimately interwoven with social life. While, consequently, the sphere of our labour, so also that of our convictions, is less limited by the radius of an asylum, more especially as the cases to be decided by court or jury in which the verdict of insane is contingent, rapidly increase, it is a question for us to echo forth from hence, what party is competent to pass such a verdict. Is any court, judge, or jury, without special evidence to justify it? Could a physician pronounce finally on the ambiguous tortuosity of a will? Can a lawyer or a jury be justified in returning that verdict which is now so common, so easy, and so cheap, of insane in a case of suicide, where in all probability the first act of insanity was the act of suicide itself? Is it not equally immoral as *authoritatively* relaxing the bonds of responsibility and guilt, and confused as announcing a conclusion without premises? Is it more irrational than our other hackneyed verdict, given with all thoughtless flippancy, "Died by the visitation of God," whenever there is no palpable cause of death assignable from subsequent investigation.

I fear we must acknowledge the increase of insanity both at home and abroad. I quote from the 'Times' (June 12th), which states that there were in workhouses "5160 women and girls, imbecile,

idiotic, or weak-minded." I quote from the 'Lancet,' which says that there are fifty-eight lunatic asylums in Prussia, besides thirty-two which are only preparatory or provisional, and that the number of patients in these has been progressively on the increase, there having been in 1853, only 4054, and in the successive years to 1860, 4094, 4074, 4278, and 4882. The 'American Medical Times,' as quoted in the 'British Medical Association Journal,' writes of New York—"in this State there are upwards of two thousand insane persons confined in almshouses, penitentiaries, and gaols."

It is a question whether that clause in the new Poor Laws Removal Act, which throws the charge of the patient from off the parish to which he belongs, and on to the common fund of the union, will not tend to increase the number of imbeciles and idiots in the county asylums. If so, it is useless to expect the reception of recent cases, and our efforts must be in great measure neutralised against both prevention and cure. Those noble institutions, asylums for idiots, have a claim upon the public which should be liberally responded to, and it is matter of no small gratulation that they are under the fostering care of one of the ablest and most philanthropic men of our day, and that we can point to their great supporter, Dr. Conolly, as a valued member of our own body. I fear that the pressure for admission into these valuable institutions is very great, and that many are retained in the county asylums to the discomfort of their more legitimate inhabitants. I know an asylum where there are two congenital idiots. One, nine years of age, the other four and a half, and yet the house will not hold half the patients demanding admission, and it is in contemplation to enlarge. It has now 96 per cent. of probably incurable inmates. The difficulties which beset the questions of distribution and provision for such increasing numbers is very great; but the subject of prevention is more difficult still. Who can stop that fertile source of both insanity and idiocy, scrofulous marriages? Who can check the course of the dypsomaniac?

"Though mortal mind may fail
To tell how the most trivial circumstance
May operate in the mass of combinations,
The fine deep moving processes of life,"

still there is a fearful seal which stamps the lineage of patients inheriting a strumous diathesis. There is a want of vitality in the brain, it is too large, or too small; soft and pulpy, heavy in its functions, and liable to effusion from vascular debility. The practical difficulties from this source of evil are immense, and whatever the class among whom the attempt may be made, they each and all defy classification. The difficulty of engaging in this preventive service is not from any position in society alone, but it arises from the feelings and from the ages of those with whom we have to deal.

They are the young, who, if they have forgotten the literal translation of Cæsar's 'Commentary,' or if they never heard it, they still adopt the self-satisfying one, "I came, I saw, I married," and however unpalatable the assertion may be, I fear the result of such rapid evolution is too often a cripple, a maniac, or a fool.

One of those main channels into which our investigations must continually flow, and to which all special streams of observation and discovery must be tributary, is the correlation of brain disease and mental aberration. It is most satisfactory to have to record the continuous patient research, the amount of thought, and the studious microscopic scrutiny which have been devoted to this subject. Upon the very threshold, as it is, of the unsolvable mystery of the connection between mind and matter, the darkness of that central mystery must necessarily hang over this subordinate portion of the problem. To a philosophic mind, not charmed away from the severe path of induction by attractive theorising, nor chilled by the delay in assuring themselves of those laws which are mighty in their simplicity, our present state and our future duty are equally clear. In our present state we cannot be said yet to have arrived at any *certain* law of relation between distinct phases of insanity, and distinct forms of cerebral disease. Our duty is to continue increasing the number wherein the form of insanity as known in life, and the condition of the brain as observed after death, are registered together. The problem, as a matter of scientific discovery, and as a means of practically advancing the treatment of disease, is of very different dimensions. In the former case it is very great, in the latter it is probably very small. Our therapeutic power must always be far greater than our physiological knowledge. And for this simple reason, that we have *two* available avenues towards the converging point of their union, which is shrouded from our understanding. The structure of the brain is to be acted upon in both cases indirectly through the body and through the mind. We are, perhaps, guilty of a paradox in our phraseology, having enthroned the term psychology on the level of the inductive sciences, while more accurately and practically we are craniologists. Strictly speaking, craniology is the science of the disease as seated in the brain. Psychology of its symptoms and manifestations. As to the physical treatment of brain structure, through diet, medicines, exercise, and asylum retirement, nothing need now be said. As to the mental or psychological treatment, without running over the old strings whose tones are familiar to us all, I would keep to those points more particularly when we come in contact with those of other professions. We have not, I fear, hitherto been duly attentive to the process of introducing thoughts into the mind which at once would begin to operate upon the physical structure. A *fit thought*, introduced *ab extra*, can create tendency to healthy circulation, and normal condition of the brain

matter, as a poisonous one can disturb the machinery, and fix that disturbance in the form of cerebral disease. The wise administration of religious *consolation* is perhaps our most powerful agent. Where that *consolation* is withheld from diffidence or fear, the approach is close upon—

“that path of old, Spinosa trod,
To man a coward, and a brave to God.”

But the agent is a “sharp sword,” by its own designation, and the higher it is tempered, the keener that the edge is ground, and the more morbidly sensitive the surface it has to touch, the greater is the danger from its injudicious use. While I can register many thoughts and passages from the Bible, simply and strictly among the most powerful agents in the Pharmacopœia, while I can recall happy, faithful death-beds, after prolonged residence in the asylum, and mark the peculiar phenomenon of the candle just flickering up anew before going out in the short period of positive sanity previous to death, I would still guard our asylum chaplains, lest by an unwise administration they change a remedy to a poison. The power of fanatical distortions of the gospel to produce insanity has been only too fearfully illustrated of late, and plentifully treated in many of our periodicals. In the other direction is the power of simple presentation of certain truths, actually to give the first impetus towards cure. Nothing can be more striking than the undeniable fact that the very *definition* and essence of insanity seem lost, while the insane can be *healthily* recipient of the highest thoughts upon which the most rational can reflect. It is thus with moral delinquency, and it is thus with mental distortion; and by careful investigation of each case, the phase of insanity, and the individual character which must be the substratum of it, may be acted upon on the first principles of all the therapeutic art.

A man's moral character and his spiritual character, his amiability or his moroseness, his purity or impurity, his hypocrisy or abandonment, are clearly to be distinguished after some intercourse, through all the clouds of insanity. And it is practically understood, too, without any of the subtle niceties, or endless confusions of legal questionings, and categorical distinctions, how far insanity merges moral responsibility. It is understood by the physician, and it is irresistibly felt by the patient himself; so easy is it for us to perceive the difference between the sufferings of insanity, and the moral madness of sin, and to retain analyses of those two, which are but contingently united. All this can only be done by the discriminating eye, and the mind of the physician.

It is a vital principle at length acknowledged, now that the legislature, by requiring every asylum superintendent to be a specially educated *medical man*, has, at least indirectly, condemned the paradox of the old system of visiting physicians; accompanied, as it must be,

with interference, and fraught with injury and discomfort. The disinterested withdrawal from the Metropolitan Asylum of him who held the highest position in this respect, must warn back the assumption of all others, and prove that their introduction must be merely nominal.

In approaching, gentlemen, as I feel now that I must, the confines of very tender ground, I desire, before I take one step upon it, to speak with all deference and respect of the Commissioners in Lunacy; to express regret at the loss of Mr. Procter, and pleasure at the appointment of Mr. Foster. For myself, I should gladly hail an increase in that body, and when I look, as I now do, upon those who would adorn that commission, and augment its vitality and strength, I would gladly render that anticipative respect which a master mind must always command from a mind of mediocrity. Whether there should be undivided authority in this official body is a question upon which some difference of opinion may exist. But perhaps you will pardon our personal intrusion here, as I assure you that, through the long course of thirty-one years, I have never known one hour's discomfort from the visitors of the Suffolk Asylum. All, however, have not been so favoured as I have been, and some of those conflicts well known to us, and to which it is not necessary particularly to refer, only serve to establish the conviction that there should be undivided authority somewhere. Conflicting opinions must harass the superintendent in his duty, and impose upon him needless distractions. He has enough upon his mind, without being thwarted in his efforts by one party, or teased with immaterial suggestions from another. He who is honest in his endeavours, may be pardoned if he couples his honesty with some little jealousy of intrusion upon unimportant points. The conjunction of these feelings is the great preventive against the perpetuity of error. The asylum superintendent can take no subordinate position. He must act from an infinitely higher motive than the aim after official commendation, and hold himself altogether free from the fear of official censure.

The valued proprietors of our private asylums are equally interested with public officers in these questions. How many honoured names have been rudely taken in vain? how many has the boldness of ignorance exposed to annoyance, from the hasty and injudicious urgency for the removal of patients only partially restored? Some alleged lunatic's friends, as they called themselves, obtained the removal of a patient from a house of high respectability and name, contrary to the opinion of the resident physician, and in opposition to his own expressed desire; and that gentleman was seen by a late friend of my own, only a few weeks afterwards, painfully exposed to the disreputable frequenters of the Strand. "Every encouragement," said Marshall Hall, "should be given to the devoted investigator, every obstacle, every source of annoyance and distrust, should be entirely

taken away. The physician makes great sacrifices; he exposes himself, it may be, to misrepresentation; his path requires cheering; it should not, and it ought not to be, unnecessarily interfered with, or beset with thorns."

I can cordially echo these sentiments of the late Marshall Hall, and I would conjure my colleagues by "the rights of our fellowship" (I wish I could add by "the consonancy of our youth,") to take care, while their minds are on the stretch, lest the progress of improvement should sink into collapse; to guard their own health, by joining some lighter recreations to their heavier weights. I wish every one of us had a hobby. Rosinante is essential for recruiting the spirits as well as for the main purposes of chivalry. "It is all very well," says the philosophic author of the 'Caxton Papers,' "to trace the symptoms and prescribe repose. But repose is not always possible. A brain habitually active will not be ordered to rest. It is not like the inanimate glebe of a farm, which when exhausted you restore by the simple process, 'Let it lie fallow.' A mind once cultivated will not lie fallow for half an hour. If a patient habituated to reflection has nothing else to meditate, his intellect and fancy will muse exclusively over his own ailments, muse over a finger ache, and engender a gangrene. And what is to be done? Change the occupation, vary the climate, call new organs into play, restore the equilibrium deranged in overweighting one scale, by weight thrown into another." The conscientious superintendent of an asylum is alarmingly exposed to that condition of mind caused by the persistent tension of the brain, called by Dr. Ordonaux mental hyperæsthesia. "The mind though greatly fatigued is not disposed to quiescence, but it continues to oscillate under the reflex influence of its original stimulus." Many sad results from such a condition are known to us, and we think that the Commissioners in Lunacy, from their conviction of this fact, have done themselves honour in urging a limitation to fifteen years instead of twenty, for the grant of pensions to medical officers. Gentlemen, we thank them, but we ask for compulsory enactment for this grant. We deserve what we solicit before we ask for it. We do not make the request as an inducement for future exertions, though it is of the greatest moment that all pensions should be made positive in this latter point of view. In order to support any stretch of mind, and keep up the vigour of any science, it must be permitted to hold out some permanent encouragement for men of talent and research to devote themselves to it. If we are met with the objection that the demand is made by interested parties, I for one most candidly allow it, but I contend that the interested parties are the insane poor of England. Only lower the honorable reward which is the ladder to "all high designs," and "that which should accompany old age," and see if the loss will not injuriously weaken the pulse of self-sacrifice

and life-long energy, which now throbs with regularity and health. It is this which makes us feel that we should be entirely independent upon the decisions in amount even of a liberal magistracy, and free from the financial observations of sessional meetings or sectional boards. There may be every desire to acknowledge the claims of long and faithful service; the public may estimate individual exertions made in the cause and for the welfare of its afflicted population, but we look to the legislature, for what we think the legislature should not withhold, decided security against any disappointment, and reward of the servitude of fifteen years' residence in an asylum, with a positive and permanent pension.

I can now, gentlemen, only look back with humility on this feeble effort to conduct you a few steps upon the beaten path without attempting to open up new avenues on it. Though I have traversed that path longer, you have traversed it more philosophically than I; but that you have done so with more hearty desire for the good of the insane wanderer, for the steady advance of the sure inductive science of psychology, and for the general philanthropy of all; I hardly can allow. While we yield then, together, to the entertainment and instruction which swarms around us in this marvellous era, let us never be distracted from the enthusiastic and philosophic view of every asylum as a great exhibition, with its unnumbered manifestations of mind, reflecting all the colours of the opal, and promising more discovery than the utmost to which we have hitherto attained.

Dr. Bucknill: Mr. President, I beg to thank you in the name of the large body of members here present, for your able address. It is a privilege, sir, to hear such large and humane views on so many important questions so admirably expressed; and whatever opinions we individually may have entertained upon them, I am sure we are all truly obliged for the instruction you have afforded us.

Dr. Munro: Will you allow me, sir, to second that, as I think—in the position in which I stand, being one of the censors of the college just now, I am the person who should second it. I feel that I have not myself taken the interest in the working of this association which I ought to have taken; therefore, I do not feel that I am at all an important member; but, as being connected with the College of Physicians, I desire to second this vote of thanks to you. I unfortunately happen to be a visiting physician of an hospital, and therefore I am afraid I am not at this moment in very good odour here. I hope, however, that though I am a visiting physician, I shall do the best I can as long as visiting physicians continue. (Hear, hear.)

The President: I am very much obliged to you, gentlemen, and I can only regret that what I have had to say has not been more worthy of your attention. Our first business now is to receive the treasurer's report.

TREASURER'S REPORT.

Dr. Robertson, in the absence of the treasurer, read the annual financial statement.

On the motion of *Dr. Robertson*, seconded by *Dr. Williams*, the report was received.

Dr. Robertson: With reference to the treasurer's report, I have now an unpleasant part of my duty to perform. We have seven heavy defaulters. A resolution was passed at a general meeting some years ago, that any gentleman being two years in arrears in the payment of his subscription, payment having been demanded for three months by the secretary, should be struck off the list. I have always been unwilling to do that, and the names have remained, but I hope you will not come down on me for the arrears. (Laughter.) The heaviest defaulter is * * * * *. I understood from *Mr. Lee*, when I took the office of secretary seven years ago, that there was a small outstanding claim of *Dr. * * * ** against the association.

Dr. Williams: Is it needful to go over the names? I should think that could hardly be necessary.

Dr. Robertson: I do not like to take the responsibility upon myself.

Dr. Wood: Have you written to these gentlemen annually?

Dr. Robertson: I have written to them repeatedly during each year.

Mr. Warwick: I think I have not paid for five years. I did not receive any communication till a week or two ago, having been travelling about. I think it would be desirable to write to the gentlemen who are defaulters. It may be only an act of neglect on their part.

Dr. Robertson: I had not your address, and I knew that your money was safe. I have written to these gentlemen whose names are before me, dozens of times, but I do not like to strike them off the list without some authority.

Dr. Campbell: I would propose that their names should be struck out of the list. It is useless mincing matters. We had better act according to our rules.

Dr. Williams: It is a matter for the committee, I think.

Dr. Robertson: The committee discussed it, and referred it to the general meeting.

Dr. Williams: I think we should request them to manage a matter of that kind, and not bring any names of defaulters before this general meeting.

Dr. Wood: It is certainly a delicate question to bring before the public meeting; and, after all, the offence is not so very great. I

WILLIAM LEY, Treasurer of the Association of Medical Officers of Asylums and Hospitals for the Insane.

Treasurer's Report.

323

BY RECEIPT.		BY EXPENDITURE.	
	£ s. d.		£ s. d.
Balance of Treasurer at last report . . .	80 19 8	On account with General Secretary at the date of the last audit . . .	5 3 4
Subscriptions received—		Expenses—printing, publishing, and editorial, of four numbers of Association Journal . . .	132 6 8
By Treasurer . . .	107 7 4	Ditto of General Secretary . . .	5 0 11
By General Secretary . . .	18 18 0	Stamps, circulars, and sundries—	
By Secretary for Ireland . . .	23 2 0	Of Treasurer . . .	1 8 6
By Secretary for Scotland . . .	11 11 0	Of General Secretary . . .	2 2 0
		Of Secretary for Ireland . . .	1 13 0
		Of Secretary for Scotland . . .	0 6 6
		Total	148 0 11
		£ s. d.	
		76 0 10	
Balance of Treasurer . . .		6 11 9	
of General Secretary . . .		11 4 6	
of Secretary for Scotland . . .			
		Total balance	93 17 1
		Total	£241 18 0

Audited and found correct,

J. H. PAUL, Auditor.

ROYAL COLLEGE OF PHYSICIANS;
July 3rd, 1862.

(Signed)

WILLIAM LEY, Treasurer.

LITTLEMORE; July 1st, 1862.

would suggest that the matter might be submitted to the President. Their names could be struck out by his authority, and that would be an official act.

Dr. Bucknill: You might mention, in general terms, that so many members are in arrear, and not having answered to the applications for payment, their names will be struck off the list.

Dr. Campbell: I was present some years ago when a rule was passed on the subject. What in the world is the use of framing rules, and having them printed, if we are not to act up to them out of feelings of delicacy in mentioning names? We may as well do away with our rules altogether. The rule that I refer to was passed unanimously by the association, and if these gentlemen have brought themselves into it they must take the consequences, and I say, decidedly, that they should be struck off the list. I call it playing with the association. If the rule is there, it had better be carried out; if not, I do not see the use of rules at all. Either stick to them, or do away with them. I beg to second the motion that these gentlemen be struck off the list.

The President: In the Eastern branch of the British Association we take a preparatory step; we read over the names of the defaulters at a general meeting, and then, if there is no notice taken of the matter, their names are struck off. It seems a little milder course to adopt to read their names over before you send them adrift.

Dr. Munro: Would you strike them off in the first or the second year?

Dr. Robertson: In three years.

Dr. Munro: I was a defaulter four or five years. I thought I would run on till the amount came to £5.

Dr. Wood: I would suggest that this matter of defaulters is one that need not occupy our time. It can be safely left in the hands of the committee. It is not desirable that our time should be wasted in a matter of this sort. As, however, there is a distinct motion on the subject, I would say that I hesitate lending my name to any such harsh measure. I can quite understand that the omission to pay has arisen in many cases from inadvertence or carelessness, or want of business habits, and without any intention of shirking the responsibility of membership. Before taking such an extreme step as turning these gentlemen out, I think we ought to give them one more opportunity. Let another letter be sent to them, stating that in the event of their not paying before a certain day their names shall be struck off. The proceeding at present proposed seems to me somewhat harsh. It is true there is a rule on the subject, but that rule has not been acted upon.

Dr. Campbell: I should be glad if Dr. Robertson would read the rule on the subject.

Dr. Robertson: The rule is, "that any member in arrear of his

subscription over twelve months of the expiration of a year, and more than three months after application, shall cease to be considered a member of the Association, provided no reason satisfactory to the annual meeting be assigned for the non-payment of such arrears." The question, therefore, is distinctly referred to the annual meeting; "if no satisfactory reason for the non-payment is brought forward," it is for the annual meeting to strike these gentlemen off the list. I am strictly within the rule in calling upon the general meeting to perform this unpleasant duty.

The President: If any gentleman has a satisfactory reason to assign, perhaps he will now do so.

Dr. Wood: Before we carry out the rule now, I think we ought to consider how often it has been disregarded. At present, I believe we should come within that rule. I believe it has been my custom to pay my subscription every two years, because I have not been able generally to attend the provincial meetings, and I have usually paid in that way. It might have happened that a special engagement might have prevented me from being here to-day, and I might have gone on for a third year. At any rate I come at present within the provisions of the rule, and if it were strictly enforced, I am no longer a member of the Association. I dare say there are many other gentlemen in the same position, and I would put it to the meeting whether it is fair, seeing that the rule has been a dead-letter so long, that it should now be put into practice so fiercely as is at present proposed. I would propose, as an amendment, "That before the names of members whose subscriptions are in arrear are removed from the list of members, a final notice of one month from this date be given them."

Dr. Munro: I beg to second that amendment.

Dr. Bucknill: I should not object to an arrangement that after such notice has expired, if these gentlemen do not pay, the Secretary should have power to strike them off the list. I think no one will object to such notice being given. I think it is a pity to disturb the law, and yet the Association would regret not to adopt the course recommended by Dr. Wood. I would suggest that the motion and amendment be withdrawn, and that it be left to the Secretary to act upon the suggestion that he should write again to these gentlemen, and then put the law in force. I think it would be a pity to disturb the rule.

Dr. Davey: Any other course than that suggested by Dr. Bucknill is out of order. It is not in harmony with the rules of this Society, at least that is my impression.

Dr. Bucknill: My recommendation is that both the motion and the amendment be withdrawn, and thus to leave the Secretary to act according to the rule, with the understanding that the plan recommended by Dr. Wood, will in this way be adopted.

Dr. Wood: I do not object to withdraw my resolution, but I think we should have some specific rule, and act in accordance with it. There are many gentlemen, perhaps, in arrear one or two or three years, but after application has been made, I think the subscription ought to be paid. If you alter one rule you must alter them all. I have no desire to act harshly towards any member of the Society. At the same time if you have rules you ought to adhere to them.

The motion and the amendment were then withdrawn.

Dr. Robertson: Allow me to mention here that I have received several letters of apology for not attending this meeting, which I ought to have named before, from Dr. Browne, Commissioner in Lunacy, Scotland; Dr. Manley, Dr. Flynn, Wm. Ley, Esq., Dr. Thurnam, F. W. Casson, Esq., Dr. Stewart (Belfast), Dr. Tyerman.

ELECTION OF PRESIDENT FOR 1863.

The President: The next business is the election of a President for the ensuing year, and the place of meeting. I have not yet heard any recommendation brought forward on the subject.

Dr. Robertson: The Committee at their meeting this morning determined to propose the names of two gentlemen to the general meeting for election to the office of President for the ensuing year. The first name they bring forward is that of Dr. Skae, Superintendent of the Royal Edinburgh Asylum at Morningside, and the other name is that of Dr. Harrington Tuke, as a representative of a very important section of the Association, the proprietors and physicians of private asylums; and the Committee further propose, in the event of either of those gentlemen being elected, that the place of meeting next year be in London. We find, as we see to-day, that London is the place where we can get a good meeting. We go into the country, to Liverpool for instance, and get seven members. There is an extreme difficulty in getting a provincial meeting, whereas everybody comes to London. The names proposed by us for President are, Dr. Skae and Dr. Harrington Tuke, with equal recommendation on the part of the Committee. At the same time it is open to any member in this room to propose any other gentleman he pleases for the office of President. The Committee have no wish to press either of their two candidates.

The President: Perhaps we had better decide the place of meeting first.

Dr. W. P. Kirkman: I beg to propose that the place of meeting be London.

Dr. Munro: I beg to second the motion.

[The motion was unanimously adopted.]

Dr. Munro : With regard to the place of meeting, if I can be of any assistance in endeavouring to get you the College of Physicians next year, I shall be very glad to do so. (Hear, hear.)

Dr. Robertson : The way in which we have been received here this morning will certainly induce us to return if we are able.

Dr. Munro : I think the College would be glad again to offer this room to the Association, as far as I can understand the feelings of the authorities in the matter.

The President : If no gentleman has any other name to propose as President, I will take a show of hands on the names of the two gentlemen proposed by the Committee.

Dr. Davey : This is rather a delicate matter to decide by open voting and I think it will be better that the voting should be by ballot.

Dr. Tuke : Proud as I am of the distinction of being nominated, there is one circumstance I ought to mention. The Committee very kindly suggested that I should put myself in nomination, but I objected, on the principle that we carried this rather too far. I should myself, if voting papers were handed round, vote for Dr. Skae, who is a most eminent and deserving man. At the same time, if elected by the suffrages of this distinguished meeting, I should strive to do honour to their choice. It would not be in the least distressing to me to fail with Dr. Skae for a competitor. I am certain, if Dr. Skae is not elected, the only reason will be that he is not present. I believe the proposition of Dr. Davey to be the wiser course, and I should be glad to see it adopted.

The use of the ballot was agreed to.

ELECTION OF TREASURER, EDITOR OF JOURNAL, &c.

Dr. Robertson : The next business, to which we can proceed while the ballot is being taken, is the appointment of Treasurer. Mr. Ley has served the Association for twelve years, and I do not think that we can improve upon our old servant. I beg to move that he be re-elected.

Dr. Bucknill seconded the motion, which was unanimously adopted.

Dr. Williams : I beg to propose that Dr. Bucknill be re-elected
EDITOR OF THE JOURNAL.

Dr. Burnett : I beg to second the motion.

The motion was carried unanimously.

Dr. Bucknill : In thanking you for your continued confidence, I wish to say that it is my intention to carry out a resolution of a previous meeting, that the surplus funds should be devoted to payment for assistance in my editorial work. This has as yet been

done to a very moderate extent, and the Treasurer's balance has been accumulating in consequence. I propose now to engage the regular services of a sub-editor; and I am sure I shall have the approval of the meeting in so doing. (Hear, hear.) I do not ask for any formal approval now, because it was given two years ago.

The President: The next business is the election of our GENERAL SECRETARY. I presume that we shall all desire to re-elect Dr. Robertson.

Several gentlemen rose to second the motion, which was unanimously adopted.

The President: The next business is the election of a Secretary for Scotland.

Dr. Robertson: In thanking you for my re-election to my honorary office here, I beg to propose that Dr. Rorie be re-elected as Secretary for Scotland. He has taken great interest in the Association, and exerted himself in making our objects known throughout Scotland. I beg also to propose that Dr. Stewart be re-elected Secretary for Ireland.

The motion having been seconded, was unanimously adopted.

ELECTION OF NEW MEMBERS.

The following new members were then elected:

Dr. MUNDY (Moravia), 14, Old Cavendish Street.

Dr. T. S. CLOUSTON, Royal Asylum, Edinburgh.

Dr. YELLOWLEES, Royal Asylum, Edinburgh.

H. JACOBS, Esq., Hoxton House.

Dr. EASTWOOD, Fairford Retreat, Gloucestershire.

DUCKWORTH WILLIAMS, Esq., General Lunatic Asylum, Northampton.

G. W. MOULD, Esq., M. S., Manchester Royal Lunatic Hospital, Cheadle.

Dr. HARPER, Chester County Asylum.

Dr. J. CRICHTON BROWNE, Derby County Asylum.

Dr. J. F. DUNCAN, Farnham House, Dublin.

Dr. F. SCHOFIELD, Camberwell House, London.

Dr. HENRY STILWELL, Moorcroft House, Uxbridge.

Dr. MACREIGHT, The Bungalow, Torquay.

G. G. GARDENER, Esq., Brook House, Clapton.

Dr. DE WOLF, M. S., Hospital for Insane, Halifax, Nova Scotia.

Election of President (continued).

The report of the ballot for the election of President for the ensuing year, was as follows:

For Dr. Skae	.	.	.	.	.	19 votes.
„ Dr. Tuke	.	.	.	.	.	13 „

The President declared Dr. Skae to be duly elected.

Dr. Tuke : While I congratulate Dr. Skae on his election, I hope the meeting will perfectly understand that I entered on this matter with a perfect certainty of the result. In the Committee we were anxious that the system of a clique electing a particular man should be abolished; and I hope the meeting will do me the credit to believe that in coming forward in the way I did, I was not in the least degree opposing Dr. Skae, but merely opposing the system which has been hitherto adopted. As it is, I congratulate the meeting on the election it has made.

Dr. Davy : I beg to give notice that it is my intention next year to submit a resolution to this Association, having for its object a new mode of election of President year by year; the object being to take the election from the few, and place that duty in the hands of the many. Let me say, in anticipation, that I think I shall be well supported by you all in my endeavour to carry out this innovation. This happens to be an innovation which is a decided improvement, and I trust that I shall be well supported.

ORIGINAL COMMUNICATIONS.

The following paper was then read by

Dr. Mundy on the Cottage Asylum System:—

GENTLEMEN,—I must first apologise to you for venturing to address you in your own language, but the indulgence which you generally and generously grant to foreigners, induces me to hope, you will also extend to me.

I embrace the opportunity which you have kindly given me to address you on a new system of our science, which although it appears to you under various names and denominations, is, in reality, but one and the same thing, and has raised itself by its importance into a question of the day.

I cannot but admit, that many look upon this question *à priori*, as Utopian: others, on the other hand, consider it a question settled by previous debate, call it impracticable, and have given it up altogether. There are indeed but few left who have at once the courage and perseverance to appear as its champions and promoters. If I therefore endeavour to examine the principles of those who look upon reform as “given up,” I think I shall be able to discuss with advantage the question, and to do justice to the three different parties. And here let me now ask you, gentlemen, whether it is right to consider a question given up and settled, which has never been debated on its own intrinsic merits, but merely on unsatisfactory examples,

and results which have scarcely given material for gossip or for the pen? And I can truly say such has been the fact with regard to "Gheel," a name which I really venture to mention before you with great reluctance, and assure you I will not repeat again. But it is not only this Belgian town, gentlemen, which I could quote to you as an example for the possibility of a practical solution of this question; I have other proofs to show that the new system and its application is successful and practical. It must be known to you that the brothers Labitte, of Clairmont (Oise), in France, situated twenty miles from Paris, have become millionnaires in less than ten years by a colonization of the insane.

In Germany, only Hanover has commenced with a small asylum of this kind, and in my own country the inhabitants of the island of "Cepel," which is situated four miles from Pesth, in Hungary, have adopted the same humane practice. In Scotland the attempt has also been made; and in England, in the Devonshire Asylum, you may trace single but splendid example of the same system, which has been introduced and fostered by a gentleman of high reputation both in England and on the Continent, but particularly valued and admired by yourselves, his fellow-labourers, including myself; I mean of course our distinguished colleague, Doctor Bucknill.

You may therefore term this system good or bad, practical or the contrary, it remains yet with all the *pros* and *cons*, a fact, an undisputable fact, that this system shows a possibility of application, and when we consider the examples I have mentioned, it shows a possibility of application in all countries in the world.

Can you, gentlemen, then doubt that an improvement on the examples quoted, however limited their sphere may be, to be impossible? It is certainly a great pity that that improvement has not been attempted by newer establishments of a similar kind;—indeed not only has this not been done, but even the principle of reform in the treatment of the insane, has been treated with harsh refusal! May I trust that you will act differently, and bestow some attention upon this serious question; for it is in your mighty and noble country, where that ever youthful aged man, whom I am happy and proud to see in your presence, has become the benefactor of all countries and peoples, and his name will be entered in the great book of history with golden letters—"Exegit sibi Doctor Conolly monumentum aere perennis!"

England's unfortunate insane, over 50,000 in number, live without restraint, through his wise and indefatigable exertions. I have mentioned this great fact, gentlemen, as historic, but your scientific minds as well as your humane feelings will wonder, when I tell you in opposition to this pleasing fact, that neither France, Italy, Germany, nor the rest of Europe, consider a no-restraint system possible. They doubt its application altogether, and treat the insane,

in opposition to reason, justice, and established principles, in the contrary way to this reform!

It requires but a momentary glance to see the great abyss which separates the countries I have just mentioned from the much more powerful step in advance to abolish "the sequestration system" of the insane. It will, indeed, be long before they will perceive their barbarity of treatment, and unless legislative power should determine it otherwise, they will certainly be in no hurry to adopt the "family system" in which every member can move without restraint, and in which the insane will be nursed and cured in the same manner in which every other patient is treated and cured.

That such is possible we know already; that we can improve upon what has been already done we certainly believe; let us then consider, gentlemen, whether this improvement be necessary, and if so, whether the new system be better than our present practice. If, gentlemen, you cast a glance from England towards Europe and America, you will at once perceive that the gigantic asylums of our day are scarcely sufficient after five or ten years to take in the increase of the insane population, and that more and more large institutions become an urgent necessity for every country, and at enormous cost.

It cannot be suffered—thus remark the "initiated"—that these asylums which swallow up millions, shall only be built for ten years, and that new taxes must continually be paid by the community to defray the enormous outlays which new asylums require, and that this tax is continually to increase for the ever-growing demand of further asylums. Others again say, that it cannot be endured any longer to permit asylums to be built like fortresses and prisons, and for accommodating thousands of patients "pell-mell." By such centralizations the medical influence becomes a mere illusion, and these costly institutions, therefore, offer no scope for therapeutics, but are mere places for the keeping, housing, and custody of the insane.

Lastly, there are *a few* who condemn the sequestration—which is still looked upon as the rule—as useless, without aim or profit to the patient's welfare. These few recommend "free air," the family life, work, or in one word, the family colonization, or cottage treatment system! The few followers of this new doctrine, maintain that by such arrangements science is alone able to extend its blessings to the insane, and to obtain for therapeutics its chief aim and object, "to cure the curable" expeditiously, and to offer to the incurable at any rate the most agreeable lot under circumstances large for utility, so sad.

Already the wonderful practical results obtained by means so insufficient, offer to the adherents of the system the best guarantees for its success if these ideas are carried out on a scale sufficiently and with a scientific basis.

If I have succeeded, gentlemen, in showing you clearly the neces-

sity of such reforms, it would also now be necessary to examine whether such reforms be sensible, practical, scientific, and capable of furthering our science?

On these questions I invite you, gentlemen, to debate at a future time, and I beg leave to place before you for that purpose the following theses, which your experience and your wisdom will solve:

1st.—What are the principles of the new system, generally termed the colonization of the insane—theoretically, and scientifically investigated and determined?

2ndly.—What practical benefits might result in reference to the examples already furnished for—(a), the therapeutics of the insane—(b), the management of the patients?

3rdly.—Is it possible that these theoretical principles can be practically adopted in England and other countries of the world?

4thly.—What is the relation between the advantages and disadvantages of the new system to the advantages and disadvantages of the present system?

5thly.—What can be done to break with the old system radically, and to promote and adopt the new one as the rule of action?

6thly.—Is this new system applicable to the rich and poor, or to both, and under what modifications?

7thly.—And what system ought to be adopted if the colonization system be not found practicable?

These seven questions, gentlemen, were indeed the objects to which I wanted respectfully to draw your attention.

The very short time which you kindly grant me, altogether prevents my doing more than laying these questions before you, and recommending them to your consideration, if you should consider the subject worthy of your deliberations.—Whether the “block-system” will be chosen, towards which England seems already to lean, or you adhere to the stagnation of our present time—at all events it would be of the highest interest for our science to hear from so potent an authority as yourselves—from men of your practical experience and independent judgment, practising the no-restraint system now upwards of twenty years; the *pros* and *cons* on the principle which is of so much importance to humanity, and which is yet so little appreciated and known, and consequently so ill judged.

I hope, gentlemen, you will not consider me presumptuous if I propose to you the discussion of those questions mentioned by me, and if you would appoint from your society a committee for the purpose of examining the same, and to let their report be placed before you at your meeting next year for further debate.

At the moment I speak to you here, the insane of Aversa rehearse Alfieri’s “Brutus,” in order to repeat and represent the same in the evening at the “Teatro Fondo,” at Naples. A great number of your own unfortunate inmates of asylums visit at the present time

“the great International Exhibition,” in which the progress of humanity is strikingly illustrated by the remarkable quantity of guns from all parts of the world! Might such extremes not tend to encourage me to hope that you, gentlemen, will resolve to debate on a new system, when you perceive that the old one is indeed tottering!

Dr. Robertson : I am sure we are much indebted to Dr. Mundy for his paper, which is the first that we have had from any of our foreign friends. I had a long and interesting conversation at Hayward's Heath with Dr. Mundy, with regard to this question of lunatic colonization; and I must say that he made a convert of me; and if I could only get the land, I should be glad to try the experiment. Land in Sussex is dear; but if I were in the Highlands, I think I should set too at once. We spoke to several of our attendants, and went into the question of their receiving the patients in their houses. In fact we went into the question of imitating what I saw carried out by Dr. Bucknill, at Exminster, five or six years ago, which is a beginning of the system that Dr. Mundy is in England to advocate. The questions raised by Dr. Mundy in this paper are of such importance that at this meeting we can hardly go into them; but I think we might adopt Dr. Mundy's recommendation, and appoint a small sub-committee, to draw up a report on the subject, instead of undertaking the journey to Gheel. I do not know any of our members who would be disposed to go there, except Dr. Browne, and we should not like to send him alone. If a committee were appointed to bring up a report on the subject at the next meeting, the question would then be fairly and properly dealt with.

[The names of Dr. Tuke, Dr. Davy, and Dr. Mundy were suggested.]

Dr. Tuke : I must decline to serve on such a committee, particularly after the speech of Dr. Robertson; for I have a strong feeling that the scheme is perfectly Utopian and absurd. Therefore, with this strong prejudice existing in my mind, I think I ought not to be appointed a member of the committee. I could not, without going to the place, upon mere hearsay, or written evidence, come to any conclusion on the subject. Dr. Robertson has spoken strongly in favour of the Gheel system: I could speak as strongly against it. I noticed the other day a statement that was made with regard to the tendency of hereditary succession of insanity; and it was remarked that children born of insane patients at Gheel were not generally insane. I do not know whether that struck any visitor at Gheel, but it was an extraordinary statement; because it would imply that the female patients at Gheel were living in that charming state that they were in the habit of increasing the population, and doing so very satisfactorily. That is one strong objection I have.

Dr. Williams : I think the subject is of very great importance. It will be obvious to almost every one conversant with the subject, that

our very large asylums are very large evils. This mode takes us to the very antipodes of our large asylums ; and I think there must be some middle course in which true wisdom will be found. I quite concur in the idea that a committee should be appointed ; but I think that that committee should visit Gheel before bringing up a report.

Dr. Robertson : I think you would not get the members to go.

Dr. Williams : If any gentleman would take the trouble to go on his own account, I imagine a committee would go. Last year I went, if I may so say, on my own hook, to Gheel ; and I have no doubt other gentlemen will be found who would do the same.

Dr. Christie : I have also been to Gheel, and seen the system in operation. There was an able report on the subject, in our Journal, some little time since, in which the system was thoroughly discussed. I think we need only refer back to our own Journal to see how the Gheel system has answered ; for the subject is there very impartially discussed.

Dr. Sibbold : I think the Association is fortunate in not having sent a committee to Gheel this year. I was there about a month ago, for the second time. The asylum, which it is necessary should be in working order before the system can be properly judged, now only contains three or four patients, so that it would be impossible for any committee this year to have made a satisfactory report.

Dr. W. P. Kirkman : It is the cottage system that we want a report upon, not the new asylum. I think that the appointment of a committee to report on the subject without going to Gheel would be attended with great benefit. Knowledge is power, and we should have the aggregate knowledge of the members of the committee to find out the truth.

Dr. Mundy : Allow me to say that I have not said one word about Gheel. I have simply spoken of the principle, which has never before been fully discussed. Gheel is a great example ; but I have not brought it forward. I was there for six months, and know it perfectly well ; but my object has been to discuss the principle of colonization.

Dr. Bucknill : One objection to the appointment of a committee seems to be that many of our associates have already made up their minds one way or the other. Dr. Mundy has certainly made up his mind that seclusion in our asylums is an unmitigated evil ; and that the residence of the insane in the cottages of the poor would be an immense improvement. Dr. Tuke, on the other hand, thinks that Dr. Mundy's proposal to place the insane in the cottages of the poor, is an absurd and Utopian scheme. Now, I think it would scarcely be wise to name a small committee with Dr. Mundy and Dr. Tuke upon it. (Laughter). For my own part, I have given some attention to this subject for some years. I have had patients living in cottages for five or six years ; and I still continue that

method. I have about a dozen female patients living in cottages; and there are also ten men living in one cottage which I have taken for them, where they go and sleep like ordinary persons. But then, you must remember that I have 650 patients to choose from. From all I can see, I should say that the system of placing the insane poor to live in cottages may be a slight help to the asylum accommodation; but that you could not go very far in carrying out that system; that you would soon be brought up by the characteristics of the patients—their unsuitability for the system—or by the difficulty of finding suitable people to take care of them. That is the result of my experience. It is a most interesting and important question; and it is one which bears also upon the best plan of building asylums. There is an asylum now about to be built in a neighbouring county—a second asylum in Surrey, for 600 patients; and some influential persons in that county are so convinced that the concentrated system of asylum building is not the best, that they propose to entirely constitute the new building of separate blocks. I think it is within our province to go into all these questions; but whether we should do so by independent investigations, or by committees, I do not know. I must own that I see some difficulty with the committee proposed.

Dr. Munro: Allow me to ask what is meant by the cottage system? Some gentlemen seem to include in it associated villages for the insane, while others speak as if they only meant private lodgings for individuals scattered over the country. I hardly think that we have a clear notion of what is meant by the cottage system. There is a great deal to be said in favour of one of those systems, which cannot be said in favour of the other.

Dr. Mundy: This question was discussed, as Dr. Bucknill knows, about two months ago, in the Psychological Society of France. It was also discussed at two meetings in Germany, and will be discussed at another meeting in September. It will be most remarkable if men of your experience should refuse a discussion of this principle, and that in England, where, alone, the system of no-restraint is adopted.

Dr. Kirkman: With regard to the question that has been put by Dr. Munro, I think the general idea of psychologists is, that the cottage system includes a cottage holding from one patient to twenty. I have had the honour of being officially connected with Dr. Bucknill at the Devon Asylum, and I have seen the system there carried out satisfactorily, up to the number of forty-two. As it appears distasteful to some members to have a committee appointed to report upon the subject, would it not be better that those who feel inclined to give the matter their consideration should supply Dr. Bucknill with papers on it for the journal. In that way the matter can be brought before the members who will be able to give it the attention it deserves.

Dr. Tuke: If that is the cottage system, I think there cannot be a better. The number of patients being from one to twenty, which

is precisely the number under my own care at the present moment, I regard that as the *ne plus ultra* of perfection.

The President: I am sure the meeting will desire to return the cordial thanks of the Association to Dr. Mundy for his interesting and valuable paper.

Dr. Bucknill then addressed the meeting as follows:

On certain modes of Death prevalent among the Insane.

MR. PRESIDENT and GENTLEMEN,—If it were needful to adduce any reason for calling your attention to the peculiar manner in which a large number of our patients cease to be our patients, through the intervention of that benevolent agency which to the helpless and the hopeless comes as the “*Tod als Freund*” of the German artist, a sufficient reason would I think be afforded by any effort made to tabulate the results of mortality in asylums as they are recorded in our annual reports. The character of fatal disease is no doubt much the same in our various county asylums, and yet the manner in which the results are recorded in our reports is so different as to render it impossible to make a satisfactory summary of the mortality in our asylums collectively.

I hold in my hand the obituary tables of a few asylum reports taken as they come to hand. The first is that of my friend and neighbour, Dr. Boyd, which differs from all the others not less in the fulness of detail with which it is made up, than it does in the peculiarity of the assigned causes of death. In Dr. Boyd’s report, the interpretation of pathological appearances, expressed by such terms as arachnitis, cerebritis, meningitis, myelitis, &c., takes the place of the generalizations which we meet with in other obituaries. If Dr. Boyd is right in his views respecting the inflammatory nature of general paralysis and other forms of brain-disease causing insanity, it must be admitted that his manner of describing the causes of death is accurate and scientific, and worthy to be adopted by us as a model for our obituary tables. But if, as I think, the thickened membranes and the softened substance of brain and spinal marrow which we so often find in our asylum necroscopies, cannot be shown to be the results of inflammation, and can only as yet be recognised as the results of processes of diseased nutrition, the real nature of which it remains our task to investigate; then I think it will, for the present, be better to use the generalizations of the causes of death which we find in most obituary tables. It is, however, most important that we should not use these generalizations more largely than we are compelled to do by the present state of our knowledge, and if our associate to whose obituary table we have referred, has employed a greater degree of pathological exactness than we can imitate, it is not, on the other hand, needful that we should generalize every form of death not readily accounted for by local

disease under terms having such wide and indefinite application, as to be almost without meaning.

I have here the report of an able asylum physician, who in an obituary table of forty-five cases, attributes fourteen, or 30 per cent. of them, simply to "exhaustion." Here is that of another who attributes eleven out of thirty-four to the same indefinite cause. In another report I find a number of deaths attributed to "prostration," which is perhaps a synonyme for exhaustion; while in other reports the terms "gradual decay," or "general decay," appear often to be used to express the same facts; so that an examination of these obituary tables leads to the belief than one of the largest classes of which they are made up is entered in the various reports under very different headings, and that the death of a patient under identical circumstances might in the obituary of one asylum be attributed to "cerebritis," or "myelitis" and in another simply to "disease of the brain," in another to "gradual decay," in another to "exhaustion," and in a fourth to "prostration." The fact at the bottom of all this confusion is, that the insane die largely of forms of disease which are not tabulated in any existing systems of nosology. Even when a person suffering from mental disease dies from some recognised form of bodily disease, from phthisis for instance, the most frequent form, it is found that the symptoms of the bodily disease are greatly modified, and its aspect often wonderfully changed; for insanity is not confined to the brain, and, when it is confirmed, a man becomes a lunatic to his finger ends; literally so, for scabies will often abound on an idiotic or demented patient without seeming to touch the blunted sensibility, just as phthisis often ravages the lungs of the insane without producing cough. The most ordinary diseases of the insane, therefore, require special knowledge of their peculiarities, although we have yet to endure to be told that physicians skilled in the treatment of the insane require the assistance of physicians who are not skilled in the treatment of the insane, whenever they suffer from ordinary disease. With regard to the peculiar forms of disease here referred to, from which so large a proportion of the inmates of asylums die, we find that they are for the most part different varieties of the gradual loss of power of the nervous system, more or less chronic, in their course; and to which our associates apply the terms exhaustion and decay in rather a promiscuous and undetermined manner.

In some of the obituaries both of these terms are to be found, in others only one of them; thus, in Dr. Robertson's report, fourteen patients are said to have died of exhaustion, but not one death is attributed to any form of decay; in Dr. Wing's report eleven deaths out of thirty-four are attributed to exhaustion, and one to old age, but none to decay. On the other hand, in Mr. Hill's report, ten cases are attributed to gradual decay, and five to old age, while only four are attributed to exhaustion. And in Mr. Cleaton's report, thirteen

deaths are attributed to senile decay, while only five are attributed to exhaustion after mania and melancholia. I cannot, in examining the tables, find that any discrimination has been used in these terms exhaustion and decay, though probably the former is more frequently intended to designate that failure of the powers of life which rapidly supervenes upon acute symptoms, and the term decay is used to indicate the more chronic processes of degradation through which the nervous system passes in several forms of insanity. If the use of these words is to be continued, no doubt this distinction in their employment ought to be preserved; but I am strongly of opinion that one of these terms ought to be disused, and that the other ought always to be characterised so as to bear a more definite meaning. The term of which I advocate the total disuse is "exhaustion," to whose indefinite influence we have seen that in some large obituaries as many as one third of the whole number of deaths is attributed. Now the manner in which patients suffering from acute mania, die from exhaustion, is very similar to the manner in which cases of typhus, or cases of delirium tremens die from exhaustion. There are the same influences tending to death in both these diseases, and especially so in delirium tremens; the same loss of sleep whereby the nervous system is deprived of the opportunity of rest and repair, the same deterioration of the nutrient qualities of the blood, and the same death by syncope, due for the most part to asthenia arising from exhaustion of nervous energy, but often greatly assisted by poverty of blood. The mode of death, therefore, both in acute mania and melancholia, and also in delirium tremens, and in a large number of cases of typhus, is death beginning at the heart; that is, death by syncope, the largest factor of which is asthenia. Such is the mode of death, more precisely expressed than by the vague word exhaustion. But in obituaries we do not endeavour so much to indicate the mode of death as to name the remoter cause of death, namely, the disease which leads to the portals of the dark house. We do not say that a patient dying of delirium tremens, or of typhus, died of exhaustion, or even of asthenic syncope, but we name the disease which led to this cause of death; and in like manner I urge it upon the members of our Association to recognise in their obituary tables, the undoubted fact, that acute mania and acute melancholia, with persistent delirium exhausting the powers of life, with insomnia and refusal of food preventing repair, are in themselves bodily diseases as fatal as typhus or delirium tremens. Let us therefore, in assigning the cause of death, always give the name of the disease, though we may choose in addition to it, also to specify the mode of death. For example, let us say in an instance where the powers of life have been worn down by the uncontrollable course of acute mania, that the patient died of acute mania, though we may add that the mode of death was asthenic syncope; and in those acute cases

where food has been refused, either from delusion or from the diseased condition of the gastric membranes, let us say that the patient died of acute mania, or acute melancholia, adding, if we think fit, that the mode of death was anæmic syncope from refusal of food.

In support of my recommendation that we should disuse this vague word "exhaustion" as a cause of death, I am glad to be able to cite the authority of the Registrar-General, who always objects to accept exhaustion as a cause of death, unless the disease which caused the exhaustion is also specified.

The term "decay," which is also so much in use in our obituary tables, cannot in many instances be replaced by any other term, because it expresses not so much the mode of death as the cause of death, in the absence of any definite disease to which death can be attributed. But while I object to the term "gradual decay" as the needless employment of an attribute, since all decay must be gradual, I wish earnestly to solicit the attention of the Association to the necessity which exists of defining more accurately the various kinds of decay under which our patients succumb. The only kind of decay which is usually defined in our tables is that of old age; and although this may be taken as the type of all other forms of decay, it will be obvious from an examination of our tables, that this term is used to indicate the form of death in a large number of persons of middle life. By fatal decay, I understand that gradual failure of all the organic functions which, without the aid of active disease, results in death which neither begins exclusively at the heart, nor yet in the brain, but is at once the result of degradation of the cerebral, spinal, and ganglionic nervous systems, of impaired assimilation and diminished nutrition; so that watching the advances of death it is difficult to say whether it invades most through the heart or the brain. The nature of senile decay, which is the simplest and typical form of decay, is by no means so well understood that we can confidently take it to illustrate the various other forms of decay to which it bears analogy. I myself think that a marked declension of the function of the nervous system throughout the body is the ultimate fact in the history of our decline in old age to which all others must be traced; for although as Dr. Symons points out in his able article on Age, in the 'Encyclopædia of Anatomy and Physiology,' this defection of the nervous function is partly the result of diminished force of circulation and diminished energy of assimilation and nutrition; it must be borne in mind that these latter functions are themselves dependent upon the integrity of the nervous function. In the decay of old age it may be impossible justly to apportion that which is effected by the lost energy of the nervous function, and by the declension of the functions of circulation, respiration, and secretion, through thickening of the capillary walls, or collapse of the cells. All the functions are so inter-dependent that it is impossible to say where death com-

mences to break the circle of life ; but the decay of earlier age is often directly traceable to degradation of the nervous system. Either that system is congenitally imperfect as in idiots, and prematurely refuses to discharge its functions ; or through the influence of recurring disease like epilepsy, or through the shock of disease whose active processes have ceased, as that of past inflammation, the state of nutrition of the nervous system becomes altered in some manner in which we can only recognise the gross changes of the bulk and appearance of the organs. We see the brain and spinal marrow diminished in bulk and consistence, and changed in colour ; and we perceive that all its functions fail. All the other organs of the body may, so far as we know, be healthy ; but yet a train of symptoms commences which very closely resembles those attending the decline of life from extreme age, and these are the forms of decay which I wish to recommend our associates to specify more distinctly in their obituary tables ; and I think at least we may distinguish—1, the decay of idiocy ; 2, the decay of epilepsy ; 3, the decay following apoplexy ; 4, the decay of dementia ; and 5, the decay of old age.

The decay of idiots is very remarkable. Some of these imperfect beings appear to arrive at real old age at a time when man scarcely attains maturity. They become feeble, decrepit, and all their functions decline, and thus they pass out of existence without any symptom of positive disease. In connection with this early decay of their stunted life, a very interesting fact may be mentioned, that in some idiots a premature maturity may be observed. Idiot children under nine years of age sometimes exhibit all the signs of puberty, a fact which may bear some analogy to the premature ripeness of fruit, the growth of which has been arrested by the tooth of the worm. The idiot child whose development is arrested by the inability of its defective nervous system to continue the processes of growth, undergoes those changes which in healthy children take place when their growth ceases in the normal manner ; these changes, by which the nutritive fluids are directed into new channels, are those of puberty.

The decay of epilepsy closely resembles that of idiocy, and is often combined with it. An epileptic may die in various ways ; he may die from coma and asphyxia following a fit, or rather a succession of fits ; he may die from syncope, after a severe fit which has so paralysed the nervous energies that the heart ceases to beat from asthenia ; and he may die from what I venture to call epileptic decay, in which the fits have no immediate influence in the causation of death. In these cases the fits, in some manner to us unknown, change the nutrition of the whole nervous system, the functions of which decline, and the patient dies deprived of sense and sensibility, in what I venture to call the decay of epilepsy.

By the decay of apoplexy I wish to indicate those cases in which the patient, after having recovered from one or more apoplectic attacks,

gradually loses first the mental, and then the other functions of the nervous centres, at a considerable period after the incursion of the disease to which these results are primarily to be attributed. Some, but by no means all of these cases have more or less local paralysis, but they are all distinguished by that gradual failure of the powers of innervation, circulation, and respiration, which characterise other forms of decay. These symptoms are also observed in no inconsiderable number of cases of chronic insanity in which profound dementia is either the primary or the secondary form of mental disease; and these deaths should, I think, be assigned to decay from chronic insanity.

With regard to the decay of old age, I have only further to observe that some care is needful to prevent cases being attributed to it which it has not caused; for it is not uncommon to see patients in extreme old age, die from an attack of mania or melancholia; and in such cases it is scarcely needful to observe that the cause of death is not the decay of old age, namely, the gradual failure of all the functions, without the interference of active disease.

I have been tempted to add to the above forms of decay that which is due to general paralysis, but as this disease, whatever its nature may be, is the actual and efficient cause of death, I think the gradual failure of all the functions by which such death is brought about, is more conveniently and properly attributed simply to the general paralysis itself. The modes of death in this disease are remarkable and instructive, making for our observation, as they do, physiological experiments as to the effect of the gradual denervation or abstraction of nervous influence upon the various functions of the organism. One of these effects I have not anywhere seen alluded to, although it produces a most remarkable mode of death. In some cases, which indeed are rare, but which I have observed several times, the molecular death of all that we can see of the body appears almost to precede the systemic death. While the heart still regularly beats, and the lungs expand, the whole surface of the skin takes the appearance of a body so far decomposed that the cuticle peels off at the slightest touch, as if from putrefaction. There is no reason why the whole of the cuticular surface should not die while life still maintains itself for a brief period in the fortresses of the organism; but these rare cases of general paralysis are the only instances in which I have ever observed phenomena which could bear this explanation. That an amount of mischief to external parts from disease or physical injury which would be fatal to a healthy organism may be endured by an organism in which the nervous bonds of sympathy have been abolished by the pathological changes of general paralysis, is a remarkable fact, of which evidence is not wanting in the frightful mortifications which sometimes occur in general paralytics, without producing any of those secondary symptoms which would undoubtedly arise with fatal readiness if such an amount of injury were inflicted

upon the soft tissues of a healthy subject. It is well known that in the lower classes of the animal kingdom in which the nervous system is little developed, an amount of mechanical injury to the limbs and soft parts which would inevitably be fatal to the higher classes, will be endured without producing much constitutional effect. Some reptiles, for instance, will bear injuries with apparent immunity, which would quickly destroy birds or mammals. Now general paralysis, which gradually deprives a man of the benefit of a nervous system, seems to place him for a time in the position of those animals which have nervous systems of a simpler nature, and to grant him for a time their immunities from the painful, and often, destructive impressions which can only be inflicted when the nervous system is in its perfect state of sensitive sympathy.

The President : I am sure we are much obliged to Dr. Bucknill for his interesting address. I confess that when he was turning his statistical returns over, and complaining about the frequency of the term "exhaustion," I was very much afraid he was about to refer to my own returns ; for I confess I have very frequently assigned that as the cause of death.

Dr. Williams : I wish to make one remark with regard to disease of the brain, not always connected with insanity, but which is connected with it in many cases. Andral made the observation long ago, that the patient does not die of disease of the brain ; and you will find that the person dies from extensive sloughing, and from results of the original disease, not from the disease itself. I have a patient at this moment who has sores as large as two or three hands, in different parts of the body, and he is dying from the irritation occasioned by these sores, not, I believe, from the disease of his brain. The remark which Andral made with regard to common diseases of the brain, is, I believe, applicable also to those connected with insanity.

Dr. Davey : It occurs to me, from the remarks which Dr. Bucknill has made, that there remains much for us to do if we would be exact in the employment of terms intended to convey the cause of the death of our patients. I think that the matter is not so easy as Dr. Bucknill, from some remarks that he has made, would have us believe. It is not always in our power to reach the diseased structures. Patients will die after a long course of illness. You examine the brain and the internal viscera very attentively, but you find no pathological appearances to account for death. The prominent symptoms may have been the general exhaustion of the vital powers, and you naturally put down "exhaustion" as the cause of death. Having for a number of years kept the particulars of the deaths of patients at the Hanwell and Colney Hatch Asylums, where the deaths were very numerous, I was obliged from necessity to put down "exhaustion" or "general debility," as most expressive of the

cause of death, and a reference to the reports of these large establishments will show that to be the case. Taking the hint conveyed in Dr. Bucknill's remarks, I think it would be well if the causes of death in our reports were divided into proximate and remote. Some such arrangement as that might bridge over the difficulty which has been brought to our attention, and render our accounts of death more accurate than they now are.

The President: I have now to call upon *Dr. Maudsley*, for his paper ON ASYLUMS FOR THE INSANE AMONG THE MIDDLE CLASSES.

Dr. Maudsley said there would be hardly time for two papers, and he desired to withdraw the one he had prepared, in order to afford *Dr. Robertson* an opportunity of bringing forward the subject of UTILISATION OF ASYLUM SEWAGE, in which the members would be more generally interested.

Dr. Robertson: I do not propose to trouble the meeting with a paper on this subject, nor have I prepared one, but I have brought with me a ground plan showing the method by which this system of sewage irrigation has been employed at Hayward's Heath. I have also asked the engineer, Mr. King, who was introduced to me by Mr. Mechi, to attend here, that he may answer any questions members may desire to put to him on the subject.

Last spring, one of our visitors called my attention to the importance of making use of our sewage, if I could find out any mode of doing it. I wrote to Mr. Alderman Mechi, who kindly sent me his book upon the subject, and did me the greater favour of introducing me to Mr. King, with whom I put myself in communication. Mr. King went over our grounds, and made us a tender at a very low rate, viz., £3 an acre (including every expenditure), for which he was to apply the sewage, and we were not to pay him unless we were satisfied with the work. Mr. King has now applied the sewage to eighteen acres of grass land. Of course, the asylum sewage offers many advantages. In the first instance, it is properly diluted, and it is not of that powerful nature which town sewage is, because we use more water, and are cleaner than people in towns. Another advantage is, that there is no unpleasant smell from asylum sewage. (Laughter.) If gentlemen would walk over our fields, they would hardly know that it was not clean water going over the ground. By receiving the sewage, which comes down in a limited quantity, into an open tank, and making use of nature's own deodoriser, earth, and putting vegetable matter and other refuse from the garden into the tank, the smell is entirely removed. There it is with all its fertilising qualities, phosphates in solution, and ammonia in combinations, ready to flow across the land free from all smell. Mr. King's principle of applying it to meadow land, assuming that he has a reasonable fall, is to divide the land into so many chains. The sewage is introduced at the top of the field, and by a very slight

manipulation it is made to run over one square chain, and then over another, as shown in the ground-plan which I hand round. Any man, with a few hours' instruction from a person who understands the work, can easily undertake this irrigation. We have an old man who does it for us for 2*s.* 6*d.* a week. He takes one square chain of grass, and then another, and so lets the sewage gradually, bit by bit, fall over the whole surface. The sewage is conveyed in two divisions, one from the male and the other from the female side of the establishment, the latter being the better sewage of the two, in consequence of the products of the laundry including the soap and other materials. We have one pipe going into a field of four acres, and another to a field of eight acres; it is on the former that our operations have been principally conducted this year. The sewage has been flowing on the field since March, and the result is that, since the 30th of April, when we first began to cut the grass, we have fed fifteen cows solely from it. In the five subsequent weeks to the 30th of April, these fifteen cows, thus fed from the cuttings of these four acres sewage meadow, yielded £80 worth of milk, valuing the milk at 1*s.* per gallon.

The field was formerly in a very miserable state, the whole farm being little better than moor land; a heavy clay soil, very much neglected, having no manure, and no drainage of any kind. The result of our first six months' experience of this sewage irrigation is, that we have all the summer been feeding our fifteen cows off these four acres of irrigated meadow land.

Dr. Campbell: What is the return per acre?

Dr. Robertson: I do not know the tonnage per acre, we have cut it as we went along.

Dr. Davey: How much milk have you obtained from the cows?

Dr. Robertson: Fifty gallons a day, and £80 worth in the first five weeks. We have been found fault with for overstating the quantity of milk, but I can say that the first week our butter rose from fifty to seventy pounds. The first day the cows would not eat the grass, and the only way we could get them to eat it was to put them on a night's fasting. The next morning they began, and have since eaten it very steadily. Our crop of hay was so heavy that the mowers would not face it, and instead of paying 4*s.* 6*d.* for our mowing, which is the ordinary price of mowing in our county, we have had to pay 7*s.* 6*d.*

Dr. Bucknill: With regard to the quantity of grass cut under the system of sewage irrigation, I may say that I have sold grass at £1 per ton, and I received £14 per acre for it; that was the first week in May, and I had a good crop of hay afterwards.

Dr. Robertson: I omitted to mention that the sewage water, after passing over the field, is so beautifully filtered, that I am sure you would drink it for spring water if it were put on your table. In the

Essex Asylum, on the other hand, the magistrates put up a large filter to stop the solid part of the sewage, and let the water pass through, acting upon what Mr. Mechi considers quite a wrong principle; and at the Worcester Asylum I saw a similar contrivance. The result is that they have nothing to show in the way of improvement of grass-land. I do not know whether Dr. Campbell can give us any account of that said filter.

Dr. Campbell: I must be allowed to dissent from Dr. Robertson. Unfortunately, we are not all provided with such admirable falling slopes as Dr. Robertson. I am perfectly aware that in the Sussex Asylum, all the farm falls from the house, and consequently there is very little expense incurred in throwing the sewage over the farm; but if you make the sewage flow on flat land, where you have no such fall, I am afraid the results would be very different. I think I see an asylum superintendent here who is one of our most practical farmers, and I believe he will tell you, what I can tell you, that where the whole machinery has been purchased by farmers for the purpose of using the fluid manure, they have converted that machinery afterwards to other purposes. With regard to Mr. Mechi's system, I think any one who reads the return that appeared in the 'Times' newspaper, will say that the scheme can never pay a farmer who has to pay rent. It is very well for Mr. Mechi, who makes thousands of pounds a year by other means, to experiment in that way, but he has never shown us any satisfactory result on Tiptree Farm. I should like to hear the experience of the Superintendent of the Derby Asylum upon this system of fluid manure, because I have more confidence in his judgment, as a practical farmer, than that of all the superintendents of asylums in England.

Dr. Hitchman: If I felt reluctant before to address the meeting, I feel still greater reluctance after the eulogy which has been passed upon me by Dr. Campbell, in reference to my knowledge as a practical farmer. I can, however, endorse, as far as my own experience goes, all that he has said in reference to the value of liquid manure upon all ordinary farms, unless there is something special in the slope, by which you can keep the irrigation at a constant flow, and then with certain kinds of grass, especially the Italian rye grass, you may get something like the profits which have been stated. I do not think that any ordinary grass would flourish for a long time upon that kind of sewage. The Italian rye grass will for three years produce large quantities, realising immense profits, and enabling you to feed a large number of cows; but unless you can keep up a continuous and rapid flow, the result would be disappointment. As far as regards the liquid sewage of the Derby County Asylum, I wish from my heart that I could make Dr. Robertson a present of it.

Mr. Sankey: At the Oxford County Asylum, the whole of the land, amounting to about twenty-four or twenty-five acres, has been

treated in this way. The land is excessively uneven, and all the sewage has been turned on by the patients, with one or two skilled persons to look after them. The ground has been altered in its level, and the whole of the sewage from the asylum, containing 500 patients, is^{*}used on the land. There are several different levels and flats, and when the sewage cannot be used upon higher grounds, it is allowed to run into cesspools, where it is mixed with the refuse ashes and clay, for we are obliged to mix clay with the ashes on account of the soil being very light and sandy, then it is allowed to run down upon the lower level, and in that way we can run it upon the grass-land, but it requires a considerable amount of filtration before that is accomplished. After filtration it is very valuable, and we have had some very fine crops.

Dr. W. P. Kirkman : As Dr. Robertson has stated that the cows would not eat the grass, I should like to know whether he took the trouble to ascertain the chemical composition of the milk, as that is a matter of great importance.

Dr. Robertson : I can only say that I have used the milk freely myself.

Dr. W. P. Kirkman : I should also like to ask whether ammoniacal gas liquor has been used, as I have been told that this product from the gas-works is a good manure for pasturage when largely diluted, and produces very large crops. I have 103 acres to experiment upon, and I think, in addition to carrying out Dr. Robertson's suggestions, I shall try the gas liquor.

Mr. Sankey : With regard to the cattle not eating the grass, I think it has arisen from the grass having grown a little too rank, and the liquid manure supplied to it being too strong. I have found that to be the case in several instances. It has been only when the liquid manure has been supplied in too concentrated a form that the animals would not take it.

MR. WARWICK'S MOTION.

The President : I have now to call upon Mr. Warwick to bring forward a motion of which he has given notice.

Mr. Warwick : I find myself placed in a situation of some difficulty, because, in the first place, the motion which I have to propose is in some degree a personal matter, and in the next place it will seem like throwing the apple of discord into what has hitherto been a very agreeable and pleasant meeting. My motion is:—"That a sub-committee of this Association be appointed to inquire into the proceedings of the Commissioners in Lunacy with regard to the licensing of private asylums in the metropolitan district." I apprehend that this Association takes cognisance of all matters that

relate to asylums, and to the status, and position, and interest of medical men concerned in the treatment of the insane. I cannot for a moment imagine that because a large number of members here are connected with public asylums, therefore they will look with indifference or coolness upon the interests of those members who have the misfortune in some cases to be connected with private establishments. (Hear, hear.) The members present are probably aware of the slight difference that exists in the mode of licensing private asylums throughout the country generally, and asylums in the metropolitan district; you are aware that the application is the same in both cases. You send in your plans, with a list of your patients, and so on. In the case of the county asylums, that is read before the magistrates in quarter or general session, in public open court; you are at liberty to have your counsel present if you like, and if any objection is made to your license it is generally made publicly; at any rate, if your license is refused, you know the reason why. In the metropolitan district no such rule holds good; you send in your application in the same way, but it is considered in secret, debated in secret, and you have no opportunity of being represented; any kind of accusation may be made against you; the decision is secret, and it is irrevocable. It seems to me that that is a state of the law which requires some amendment. Why should not proprietors of private asylums in the metropolitan district enjoy the same advantages that proprietors enjoy in counties generally? Perhaps an example will tell more than a very long story, and although I am the subject of the example which I am about to relate, I must beg your kind attention and indulgence; because if I adduce it, it is not that I wish the Association to take up any personal quarrel of mine, it is simply that I can speak truly on the matter, being thoroughly conversant with the circumstances to which I am about to refer. Two years ago I was looking out for a small asylum in the metropolitan district. In March, a gentleman who had a small asylum came to me; he had incurred the censure of the commissioners for a purely private and domestic matter, in no way relating to his patients, of whom he had but two, a middle aged lady, and an elderly gentleman. For that private matter, the commissioners took away his license, and not content with that, they wrote to the friends of the patients, advising their immediate removal before the time of the license had expired. That gentleman asked me to take his asylum off his hands. Seeing that his patients were then under compulsory removal, anything like goodwill or purchase-money was out of the question, he asked nothing, nor should I have given anything; he merely asked me to take the lease off his hands, and to buy his furniture and fixtures at a valuation, and to repay some little expenses he had been at in fitting up the house. There was no question, therefore, of purchasing the asylum as such. Before I entered into negotiations

I applied to the Commissioners in Lunacy to know whether, in the event of my taking the asylum, they would grant me a license; in return, I had an order to attend the meeting of the board. I went, and was asked many questions relating to this gentleman who wished to part with the asylum, but none respecting myself. They did not inquire into the matter of the intended purchase, but asked me many irrelevant questions, all connected with the gentleman leaving the place, not as to myself about to take it. They then told me they would send me an answer; some few days afterwards I received an answer from them, in which they said that they should feel it their duty to decline granting me a license to that establishment. Now, when I made the application, I had had seventeen years' experience in lunacy practice connected with a large public establishment, and ten years of that had been under the jurisdiction of the Commissioners in Lunacy. During the whole of that time I am not aware that any kind of complaint was made against me; I know I never incurred any kind of censure or reprimand; I uniformly received favorable and sometimes laudatory reports, and I cannot charge my memory with having one single dispute with the commissioners. Yet suddenly they, without assigning any cause, refused my license to an already existing establishment, which I was anxious to take. I have applied to them from time to time for an explanation of their conduct, and sought some reason for their refusal, but, up to the present time, I have been unable to obtain any kind of satisfaction whatever; they replied that it is not their custom to state the reasons of their decisions, and that is all the answer, and all the satisfaction I can obtain; so that I find myself, at the end of nineteen years' experience in lunacy, during which time I have never incurred any blame or censure, suddenly compelled to give up my practice in the metropolitan district, and to refuse many patients who, from previous acquaintance, would have been placed under my care. I am actually excluded from my profession—it virtually amounts to that, so far as the metropolis is concerned, and that without any kind of reason or statement being made in explanation. Now, surely, this is something like tyranny; it seems very hard, after many years' practice, that a man should be virtually shut out of his profession merely because a secret tribunal, giving no reasons for their conduct, choose to say that he shall not practise. I really have not in any way over-stated or exaggerated the case. I have been told that the commissioners are anxious to reduce the number of private asylums in the metropolitan district, thinking there are too many of them; that may be, or it may not; it would lighten their labours to have fewer, but that has nothing to do with the question; the public have a right to choose their own medical attendants, and if insanity be a disease, surely A, B, or C, the friends of the insane person have a right to select any medical man they wish to

attend their own relative. If a man is duly qualified, and there is no objection to him in character or status, it is a harsh proceeding on the part of the commissioners to exclude that man from practice. I really do not know any reason for the course they have adopted, unless it be that the Commissioners in Lunacy are strongly opposed to what may be called the Metropolitan Cottage System—that is, the system whereby the patients are placed in private houses in the neighbourhood of the metropolis. Lord Shaftesbury, in conversation with me some three years ago, expressed the strongest abhorrence of the system, and he told me that if any relatives of his became insane, he would rather place them in any common lunatic asylum than in any one of these pretty metropolitan villas, scattered round London, attended by eminent medical men. It is certain that this refusal to license is only perpetuating that system. The anomaly is this, that although you cannot have two persons in one house without a license, you may have fifty detached in separate houses. So that by refusing to license a properly qualified person, the commissioners are only increasing what has been stated to be a very great evil. I am, therefore, utterly at a loss to account for their conduct in any way. I know no private, and I can see no public reason for their proceedings. But you will ask me what remedy do I propose? I propose that a sub-committee be appointed to consider the circumstances, and, if expedient, to draw up a petition, which might be presented to parliament, in the event of the bill—the Amended Lunacy Act—being brought before the legislature. I apprehend another session will not pass without something of the sort being done; and I think a petition from this Association would have weight. I only go to this extent, that the commissioners should license in the metropolis in the same way as is done by the county justices; that the application should be made in open court; that counsel should be allowed to attend; and that if the commissioners refuse, they should state their reasons. This does not seem to be an exorbitant demand; and it is only placing proprietors in the metropolitan districts on the same footing as those in the provinces. I beg you will excuse me for having taken up so much of your time. So anxious am I that this subject should be considered on grounds of merit only, and not as a personal matter, that I have abstained from seeking a seconder to this motion, and trust to the generosity of this meeting to find me one, if they should think this is a matter worthy of their consideration. I cannot but think that a temperate agitation of this subject, and the presentation of a petition to parliament, might relieve us from what seems to me to be a very harsh method of jurisdiction.

The President : Before I ask whether any gentleman seconds this motion, I may be allowed to make one remark. I am quite sure that the medical officers of county asylums have no invidious feeling

towards private proprietors; indeed they consider their interests identical. (Hear, hear.) This, however, is a delicate question, which may require careful attention.

The motion not being seconded, fell to the ground.

Dr. Campbell: As Mr. Warwick has brought this subject before the meeting, it is only due to him to say, after the statement he has made, that we quite enter into his feelings; but we should be placed in a very awkward position as medical men connected with asylums, if we took upon ourselves what he proposes, and were to address our views to the Commissioners of Lunacy.

Mr. Warwick: Not to the commissioners, but to parliament.

Dr. Campbell: I think it would be even more indelicate to go to parliament with any complaint from us, reflecting upon the commissioners.

Mr. Warwick: It does not reflect upon them. It is a simple request that the proprietors in the metropolis, as regards licenses, shall be placed on the same footing as proprietors in the provinces.

Dr. Campbell: I only felt it right to state why we declined to enter into the subject. I think we cannot do it, out of respect to the Commissioners of Lunacy; that we should be exceeding our position in addressing them, or addressing parliament regarding a matter of which we have only heard from Mr. Warwick, and in which we are in total ignorance as to all the facts.

Dr. Davy: I agree with Dr. Campbell in his remarks with reference to this resolution. I do not think that we, as an Association, are in a position to inquire into the proceedings of the Commissioners of Lunacy in this matter. It is not our place, and certainly it will not be to our profit to do so. What is left to be done by us as a body is just to bear in mind the facts which have been placed before us by Mr. Warwick, which are very important; and let us hope that an opportunity will one day offer, when this revised law is brought into operation, to go through it carefully, and, at a subsequent period, enter our protest against this, that, or the other, taking care, so far as we are concerned, that some clause shall be inserted that would meet the difficulty which has been explained to us. We might, as individuals, or as a corporate body, bear the evil in mind, and work through the difficulty, but at present, I think, we cannot undertake the responsibility which has been suggested to us.

DR. FLYNN'S RESOLUTIONS.

The President: The next business is the resolution to be proposed by Dr. Flynn.

Dr. Robertson: Unfortunately, all our Irish members are absent, as the asylums in Ireland hold their monthly meetings on the first Thursday in the month. Dr. Flynn has entrusted to me a series of

suggestive resolutions. He does not wish to tie the Association to his words, but his object is that some public acknowledgment should be made to Sir Robert Peel for the great firmness with which he dealt with and settled the question of the position of the resident physicians in Irish asylums. He simply wishes that the Association which addressed Sir Robert Peel last year on the subject, should now make some acknowledgment of its thanks. I would, therefore, as Dr. Flynn's mouthpiece, propose that the Secretary of the Association be desired to express to Sir Robert Peel their sense of the courteous consideration he has given to the communication which was made to him by a deputation of the Association last year at their meeting in Dublin, and their extreme gratification, generally, with the rules which he has promulgated for the government of the Irish asylums, and which have been assimilated, as far as circumstances would permit, to those of England; which was what we asked him to do. What the Association asked Sir Robert Peel to do has, in fact, been done by him; and I have no doubt that the deputation who waited upon him was the cause of the new resolutions that have been adopted. Sir Robert Peel, I am told, has done all this in the face of considerable opposition on the part of the privy council in Ireland.

Dr. Stewart: I beg to second the motion. I am quite aware that Sir Robert Peel has carried his measures after very great opposition; and if he had not been very energetic and anxious about the matter, he would not have succeeded.

DR. BURNETT'S OBSERVATIONS ON THE IDIOT ASYLUM.

Dr. Burnett: I do not know that I have a right to detain the meeting, as I have not given formal notice of the observations I desire to make. But I asked the favour of being allowed to say a word or two, if there should be time at the end of the meeting. The subject is one which really involves the interests of the private proprietors of asylums in this country, and I think it will eventually involve even more than it does at this time. One or two cases have occurred to my mind since I have been here, bearing upon the point which I wish to bring forward. I will not propose any formal resolution, but merely ventilate the subject, so as to ascertain the opinion of the meeting.

I was consulted about nine months ago about a case that was to be committed to my care by some private connections of my own. The case was that of a child who had become idiotic in consequence of a slow scrofulous inflammation of the membranes. It was agreed that the child was to be admitted into my establishment, and every arrangement was made for the purpose. I had even engaged a nurse, and done everything that I thought was

necessary. I afterwards received a letter from her father, telling me that he had been to Brighton, and had there met with some person who had recommended him to place his child in the Earlswood Asylum. I said nothing more about the matter; I did not want to enter upon any discussion, and I did not condescend to make any reply to the father, beyond telling him that I had no doubt the resolution he had come to was the result of his own careful deliberation. But afterwards I thought—for thoughts will cross one's mind on these occasions—upon the time when the asylum was first established. Amongst the number of persons applied to when they wanted to get up the public interest in so philanthropic a cause, I was one, and I received a letter from the late Dr. Read, requesting that I would go and advocate the cause of the idiot. I did so; and also gave my subscription. I continued to do the same for some years, until I found that the institution was sufficiently established, and, after that, I, of course, withdrew my subscription. This asylum has been erected by the public purse. It is, in fact, an eleemosynary establishment, founded by the agency of men like the late Dr. Read, who have held public meetings and obtained subscriptions for the purpose. The asylum is built; and the public have an idea that it is erected solely and entirely for helpless idiots—a class of persons that are pressing round our asylums; for if we had an idiot asylum for every county, we should not be out of our proper ratio compared with the number of the population; because there are a thousand idiots in a population which is exceeded by that of most of our counties. Under these circumstances, what room can there be in an isolated idiot asylum for the reception of persons who are quite capable of keeping patients in a very different position, for these were people of property? I ask whether it is just that patients under these circumstances should be admitted, or that any terms should be made to receive them into such an asylum? It may be a difficult thing to determine: at the same time, I think, if we look at the justice of the matter, it is not right to draw subscriptions from the public under the impression that they are supporting the poor and helpless idiot, when, in fact, they are only furnishing good apartments for the education of rich people. I think some steps ought to be taken in the matter, or, at any rate, that publicity should be given to it. I do not want to make any stir. I do not wish my name to appear in the matter in the journals of the day, but I certainly think that the opinion of so large a meeting of our brethren as this is, should be taken as to whether that is a right course to pursue, or a wrong one.

The President: I believe the subject you have brought forward has been under discussion in other counties. I have myself heard it discussed in Essex, and in Suffolk, but only in the way of ordinary conversation. No doubt there are abuses; but whether we can take cognizance of them here is another matter.

VOTE OF THANKS TO THE PRESIDENT AND FELLOWS OF THE COLLEGE OF PHYSICIANS.

Dr. Bucknill : I am sure that we all have one feeling with regard to the courtesy and liberality of the College of Physicians in granting us the use of their noble rooms on the present occasion. I am happy to have observed, Sir, so large an assemblage of our members, not only to grace your presence in that chair, which you so admirably fill ; but also to grace this building, which I felt it was rather an ambitious thing even to think of coming to. That we have been permitted by the first of British medical institutions to occupy the greatest and most famous of the Collegiate buildings connected with the profession, is a subject of congratulation ; and calls for an expression of our best thanks. I beg to propose that the best thanks of this Association be conveyed to the College of Physicians for the use of the College rooms, for this meeting ; and that Dr. Munro be requested kindly to convey the same. In asking Dr. Munro to convey our thanks, instead of allowing them to go through the ordinary channel of our Secretary, I do so because of the very distinguished position which he holds in the Corporation whose house we occupy ; and because we feel proud in having so eminent a member of the College of Physicians among our associates.

The motion having been seconded, was unanimously adopted.

Dr. Munro : I feel exceedingly obliged by this vote of thanks, which has been paid to the College of Physicians ; and in some measure directed off towards myself, because of the happiness I enjoy at the present moment of occupying a post amongst the physicians of the College. All I can say is, that I shall do my best to get these premises offered to you again next year ; and I believe I shall be successful. I would take the opportunity of saying that I feel I have not hitherto sufficiently appreciated the importance of this association. I hope in the future, if I am spared, that I shall not be a mere silent member ; but be more active in it than I have hitherto been. The Association has my most cordial regard, and wishes for its success ; and I hope I may be the means of assisting it in a humble way ; and if one means of aiding it is the exercise of that little influence which circumstances have at the present moment given to me, I shall be truly pleased.

VOTE OF THANKS TO THE PRESIDENT (Dr. KIRKMAN).

Dr. Bucknill : We cannot allow you, Sir, to leave that chair, without giving you the best thanks of the Association for the admirable manner in which you have filled it.

Dr. Burnett : I beg to second this vote of thanks to our President.

It gives me great pleasure to see my old friend, Dr. Kirkman, in the chair; for, I believe that honour has fallen upon one who really deserves it. One who has spent his life in this cause; and who now, in the days of his honoured age, comes to us, to guide us by his counsel, and give us the benefit of his wisdom; a wisdom which, I feel confident, far transcends that of many whom we are too apt to follow.

The vote of thanks was carried by acclamation.

The President: I can but very imperfectly return you my thanks. My great regret is that I have not been able to fill the chair more ably than I have done.

DINNER.

The annual dinner took place at the Star and Garter, Richmond. The dinner was everything that could be desired. Dr. Paul acted as steward of the feast. The party numbered thirty-five. Among the guests were: Dr. Pitman, Registrar of the Royal College of Physicians; Dr. Tweedie, Dr. Markham, John Churchill, Esq., Dr. Llewellyn Williams, Dr. Edward Hart Vinen, Dr. Salomon (Sweden), Dr. Brown (New York), &c. &c. The following members were also present: Dr. Kirkman, President; Rev. J. Kirkman, Dr. William Kirkman, Dr. Mundy, Dr. Sibbold, Dr. Fayrer, Dr. Bucknill, Dr. Paul (steward of the dinner), Dr. Wood, Dr. Christie, Dr. R. H. H. Sankey, Dr. Campbell, Dr. H. Tuke, Dr. Robertson, Dr. H. Stevens, Dr. Wing, E. Toller, Esq., Dr. Davey, H. Jacobs, Esq., Dr. Boyd, J. Warwick, Esq., Dr. Rorie, Dr. Stilwell, Dr. Burnett, Dr. Lowry, Dr. Maudsley, Dr. Eastwood.

Dr. Watson, President of the Royal College of Physicians, was prevented from accepting the invitation of the Association.

Dr. Robertson has received the following communications relating to the business of the meeting.

ROYAL EDINBURGH ASYLUM FOR THE INSANE;
July 9, 1862.

MY DEAR DR. ROBERTSON,—I beg to acknowledge your favour of the 7th, informing me of the very unexpected and very gratifying honour conferred upon me by the Association of Medical Officers of Asylums in electing me President for next year. My clinical class has heretofore prevented me attending the meetings or entering into the business of the Association with that interest which I feel. I had, therefore, not the remotest reason to anticipate such an honour as being your President; and hope, therefore, that I may now be incited to use all my energies to make up for my past deficiencies by

renewed efforts for the future in supporting the objects of the Association.

I am,

My dear Doctor,

Yours very truly,

Dr. SKAE.

Dr. C. L. ROBERTSON.

DUBLIN CASTLE; *July 25, 1862.*

SIR,—I have to acknowledge the receipt of your letter of the 23rd instant, with its accompanying resolution passed at the annual meeting of the Association of Medical Officers of Asylums for the Insane, relative to the recent rules promulgated for the government of the Irish District Asylums.

I am, Sir,

Your obedient servant,

WILLIAM LAWSON.

C. L. ROBERTSON, Esq.,

Sussex Lunatic Asylum, Hayward's Heath.

WHITEHALL; *August 5, 1862.*

SIR,—I am in the receipt of your letter of the 2nd, and am obliged to you for the opportunity you have afforded me of giving expression, in less formal terms than can be conveyed in a dry official acknowledgment, to my warm appreciation of the unanimous approval by the superintendents of asylums in this country of the rules recently promulgated by the Irish government for the better management of the District Lunatic Asylums in Ireland; and I rejoice to find that our views on this subject have been endorsed by so practical and influential a body as the Association which you have the honour to represent.

I am, Sir,

Yours very faithfully,

ROBERT PEEL.

C. L. ROBERTSON, Esq.,

Hon. Sec., Association of Medical Officers of
Asylums for the Insane.

Middle-Class Hospitals for the Insane.

By HENRY MAUDSLEY, M.D.

A little more than a year ago a public meeting was announced as having taken place in this metropolis for the purpose of establishing a "Benevolent Asylum for the Middle Classes." Though many were without doubt pleased with the project of so useful an undertaking, it appears that the vast majority of the public regarded it with great indifference. For, from time to time, an advertisement in the papers—a doleful and undignified document—has complained of the want of support, begged for further aid, and reminded lately the public that the amount subscribed for the Hartley Colliery Fund over and above what was wanted, would have been more than sufficient to have started the benevolent asylum. The public indifference must be the result of public ignorance; for we well know that when the heart of the country is touched, its sympathy and help are given in a profuse and practical manner. To elicit such aid, however, there must be a reasonable and well understood end in view; and the question is, whether the promoters of this proposed asylum have given a clear idea of what they want, of what they propose to do, and of the way they propose to do it.

As the commissioners have the power of obtaining information from any lunatic hospital or asylum, they would be doing a service by supplying us with a concise and faithful account of the various asylums which have been founded and are conducted on the benevolent principle. Thereby they might succeed in dissipating the doubts of the sceptical, in interesting the indifferent, and in fortifying the faith of friends.

It seems to admit of no question, amongst those who have a knowledge of the matter, that some provision is yet needed for those insane who are poor, but not poor enough to be paupers. Many cannot pretend to pay what would be necessary for their admission into a private asylum; and others, who by the utmost shifts contrive to do so, do it at a sacrifice which cannot be justified, save by its necessity. In the latter case it often happens that those who are growing, and have to take their places in life, are deprived of important advantages for the sake of one who is perhaps for ever dead to the world. Now it is plainly bad philosophy to expend power on a dead past, and to starve the future of power, and, therefore, bad policy on the part of society to put any man in the position of being obliged to do it.

The resource which is afforded by the few county asylums which do admit these unfortunately placed insane on payment of the usual

charge for maintenance, is but a partial, uncertain, and ineffectual remedy; nor is it by any means certain that even when there is room in the county asylum, it is advisable to admit private patients. Passing by other grounds of objection which might well be urged against such a course, it may be maintained on just principles of treatment, no less than on amiable grounds of benevolence, that it is not well to place any one who has become insane in very different social conditions from those of his or her former life. If it be most dangerous, as it certainly is, to the mental health of a sane person to be placed in entirely changed external conditions, without his inner life having been gradually adapted thereto, how much greater must the danger be to the unsound mind which has lost that very controlling force of reason whereby it might adapt itself to the unwelcome change. To demand such an adaptation from the diseased mind is to put a strain on the cracked links of reason which they will scarce bear when quite sound. And that is really to begin treatment on the homœopathic principle of doing that which would be most likely to produce the disease in a sound person. County asylums have been built with a certain design, and the accomplishment of that design must be their duty. However valuable, then, their assistance may be as a temporary expedient, they cannot be considered as affording a permanent provision for the poor insane who are not paupers. It would scarcely be just, as it would certainly be unfeeling, to insist on every family making provision for the contingency of this most expensive of diseases. We must remember that many of those who become insane never recover, and of those who do recover, many sooner or later relapse. Moreover, the patient cannot be kept at home as in other diseases, but must be sent away to be treated at a great expense. Society insisting on this for its own protection, must rightly accept the responsibility which accompanies such an exercise of power; and, without question, he who by losing his reason, is forced to relinquish his rights as an active being, claims his human rights as a suffering being, and if the affliction cannot be grasped in the arms of family benevolence, it must be embraced by the larger arms of humanity. With greater power comes greater responsibility; and the correlative of those higher faculties by which man surpasses other animals is the moral duty to do, in the struggle for existence, exactly the opposite of what the animals do; in place of crushing out its weakest members it is the bounden duty of the human kind to take care of them. When, therefore, the friends of the insane cannot send them to a private asylum, and these cannot be admitted into the county asylum, and are not fit to be at large, the public must do one of two things—either subscribe money enough to keep such cases in a private asylum, or build a suitable public asylum for them.

Of the two expedients it will evidently be better to adopt the last,

because, amongst other things, if rightly carried out, it affords a means of throwing the burden of the poor insane to some extent upon the rich insane. The proprietor of a private asylum cannot be expected to receive any patient at a price which will not be profitable to him; and he can scarcely, therefore, admit at a lower rate than £1 1s. a week. Now and then, perhaps, when there are a few vacancies, he may admit one or two even at 15s. a week, and thus let charity go hand in hand with interest; but, as a regular thing, a charge of less than £1 1s. a week seems incompatible with the just demands of insanity, and the reasonable profit of the proprietor. To make even a guinea a week fairly profitable, it will be necessary to suppose either that there are a great many in the asylum, some of whom pay more, or that there are many paupers out of whom a profit may be made, or that the proprietor has inherited the establishment in good working order, and has no rent to pay, and no large outlay to make.

Compare for a moment the charge in the county asylum. The charge for maintenance is eight, nine, or ten shillings a week; in four county asylums it is over ten, and in one over eleven shillings, while the repairs of the building are paid out of a county rate. There are from 500 to 1000 inmates. There is a farm belonging to the asylum, the work of which is mostly done by patients; and the patients being paupers may be fed comparatively cheaply. With all these advantages, the county asylum finds it necessary to make a maintenance charge of nine or ten shillings a week. How, then, it may be asked, can the proprietor of a lunatic asylum containing twenty, fifty, or a hundred inmates, who has rent to pay, who has no farm, who cannot employ his patients for his own advantage, afford to maintain private patients for fifteen shillings a week, paying for the repairs of the building, and the general wear and tear out of that sum.

Look, again, at some of the public hospitals for private patients. The average weekly cost of each patient for the year 1860, was, exclusive of repairs or rent:

	£	s.	d.	<i>Average number resident.</i>
At Coton Hill	1	1	10½	105
Nottingham	1	4	11	38
Manchester	1	0	10	74
Warneford	0	19	1¾	56
Retreat	0	18	9½	116

So that the average maintenance cost of five public hospitals is £1 1s. 1d. weekly for each patient. These figures are from the report of the commissioners, notwithstanding which we must not put too great faith in them. We know that there are certain doubtful expenses

which may be put under the account for maintenance, or the account for repairs, and the most satisfactory plan would be to call for the total expenditure during the year, and to estimate the average weekly cost upon that. In the Manchester Hospital the total, and, therefore real, weekly cost of each patient for that year was £1 5s. It is true that there were extraordinary expenses that year; and the average total weekly cost was £1. 4s. for ordinary years. In a private asylum there will no doubt be more economical management, on account of a greater quantity of action and a livelier responsibility, and the cost of the same comforts would, therefore, be a little less; but if we allow three shillings a week per head for better management, saying nothing of rent, or £624 for the year on eighty patients, the cost is still £1 1s. per week. For those who cannot justly afford to pay that sum, who cannot, in fact, pay as much as they cost, public hospitals are needed. And as there are many who are in that position, it is evident that public hospitals must be the inevitable result of the extreme care and comforts now demanded for the insane, and of the supervision of a central authority.

We must look forward also to an increase in the cost of treating insanity, and not to any diminution, for the system is not yet so perfect but that it admits of improvement. One very desirable change urgently demanded, according to my experience in asylums, but especially in those which receive private patients, is certainly a change in the rate of payment of attendants. The work which is required of these officers is of the most trying kind, such as few people, who can find anything better to do, will willingly undertake, and such as it requires a mind unimpressible through the gifts of nature or the acquirements of art, to undergo without injury. Kindness, under the most severe irritation; patience with the wilfullest perversity; self-control, under the most offensive insolence; a cheerful life in the midst of the most melancholy horrors; these are the qualifications required at a cost of from £20 to £30 a year for men, and from £12 to £20 a year for women. If such valuable qualities are to be had so cheaply, all that can be said is, that the principle which asserts the price to be influenced by the demand and supply is a false one. But, in truth, they are not so to be had; and it must be confessed that an attendant is not unfrequently one who has been unsuccessful in his own business, or has otherwise missed his way in life, and who brings with him for his great responsibilities the recommendation of previous failure. To fill rooms and galleries, then, with creeping plants and showy objects, whilst the price paid is not such as can possibly secure the best material for attendants, on whom the substantial comfort of the patient depends, is really but a poor way of concealing a fundamental defect.

The admission of desirable and costly changes in the treatment of insanity, makes the necessity of public asylums more urgent.

Clearly there must be a large outburst of public benevolence to start them. For the erection of a good building, capable of containing 100 or 120 patients, and for the complete furnishing of it, with the purchase of a suitable quantity of land, nearly £20,000 will be required. One of the existing hospitals cost a little more than £30,000 for building, land, and furniture; and though that was an extravagant sum, we must admire the excellent spirit and great energy which enabled one town to raise such a sum for such a purpose. But if the thing is to be done, it is much better that it should be done well at once, than that the building should be incomplete, unsuitable, or half furnished. It should be able to offer at its commencement, before its reputation is established, the best accommodation, so that patients who can afford to pay well may be induced to come to it by the advantages which it offers. Some of the present hospitals have suffered from not being able to do that. There has been no money for completely furnishing and for properly laying out the grounds; and good patients have been invited to come to a place which had a bare, rough, unfinished, and comfortless look. Perhaps there was no carriage, or other luxury to which wealth is accustomed; or if there was a carriage, it was the used up relic of some coach proprietor, which daily creaked its rickety astonishment that it held together at all. Wealthy patients would not pay for such miserable equivalents, and so the hospital suffered, not only in not getting profits which it should have done, but in losing what might have been an excellent connection, and in having its reputation damaged at that very time when it could least afford it.

To those who say that it is not the real design of these public establishments to admit the wealthy and to make money, but rather to admit the poor and needy and to exercise charity, this question may be put. If out of six or eight wealthy patients the hospital makes a clear profit of £1000 a year and uses it in charity, is it not much better than to be obliged to appeal to the public year by year for that sum? Once fairly established, the promoters of these hospitals have a right to demand that they be made self-supporting. There is a large capital of benevolence funded in the building, and on that it ought not only to exist, but to pay a fair interest in charitable work. There is all the difference in the world between a rational and an emotional charity. The former, clearly recognising the great moral principle that it is the duty of the strong to help the weak, establishes a machinery for applying it to the insane world; it builds a hospital, offers to the wealthy lunatic excellent accommodation, makes its fair profit out of him, and then in place of using its profit in any selfish way, applies it, in accordance with its fundamental principle, for charitable purposes. Such charity is sound, efficient, and likely to last, whereas the emotional or spasmodic and

impulsive kind usually wastes half its force for want of method, and may cease at any moment.

These observations may be illustrated and confirmed by a few figures. In the year from July, 1858, to July, 1859, the income of the hospital of which I was superintendent, was £4652 15s. 5d., and the expenditure was £4589 4s. 6d.; so that there was a surplus of £63 10s. 11d. From 1859-1860 the income was £4977 15s. 1d., and the expenditure £5021 19s. 9d.; so that there was a deficit of £44 4s. 8d. Now both these years, for reasons which it is not necessary to give here, were very bad years; the income was very low in the former, and though better in the latter, it was yet far below the average. However, on the two years there was a surplus of £19 6s. 3d. This was sailing very near the wind, but the just principle of squaring the expenditure to the income was not broken. From July, 1860, to July, 1861, the income was £5660 14s., and the expenditure £5223 16s. 1d.; so that there was a surplus of £456 4s. 2d. The accounts for 1861-1862 are not yet made up, but from an approximate estimate, which will not be far from the truth, the income may be stated at £6000, and the expenditure at a little over £5400, say £5500. There will be a surplus of £500; so that for the last two years there will be a gain of £936 17s. 11d. And yet these two years were exceptional; for in them extraordinary expenses were incurred, which amounted to about £1000. Now as these will not occur again, but have now really become an addition to the capital, a surplus of from £800 to £1000 may be calculated upon every year.

Meanwhile a considerable amount of charity is exercised, as the following analysis will show. The average number of patients for the last year is 80, and the average weekly income, without including physicians' fees and extras, may be called £100, although, in reality, it is a little more. So these 80 patients have to pay £100 a week. Of these 4 pay £4 4s. a week each, and 5 pay £3 3s. a week each; or 9 patients pay £32 11s. a week towards the £100. There are 71 patients left to make £67 9s. Of these, 7 pay £2 2s. a week each, or altogether £14 14s., leaving £52 15s. for 64 patients to pay. 8 more will pay £1 11s. 6d. a week each, or together £12 12s., and there are left 56 patients, who have to make £40 3s. Suppose 30 of these to pay £1 1s. a week each, although more than 30 will do that, and we have £31 10s. towards the £40 3s. There is left £8 13s. for 26 patients to pay, or 6s. 7 $\frac{3}{4}$ d. a week each. The difference between 6s. 7 $\frac{3}{4}$ d. and £2 4s., represents the amount of charity per week to each of these 26 patients.

Of course, however, it is not desirable that these hospitals should strive for a large surplus. It must be spent in diminishing the charges for those who are ill able to pay; or another way of using it may be suggested. In a large hospital there are many disadvan-

tages; there is the accumulation of all kinds of cases under one roof and the consequent affliction, notwithstanding the best classification, of those who are slightly suffering, by the sight and noise of those who are far gone. This is a very great and painful evil. Then, again, there are the dreary monotony of confinement, the locked doors, the fixed regulations, and all that machinery of system, which is so necessary in a large establishment, but which is not necessary for some who are in it. For it admits of no question that in all large asylums there are some cases which would do very well in a private house under moderate supervision. These cannot, however, be kept at home, because they are worse there than anywhere else, and very completely destroy the comfort of the whole family. Strangers, too, who would care about having them in their houses are not usually those who care about doing their duty by them. For such cases the establishment of the cottage system in connection with the hospital would be an excellent resource, as it would also for some of those patients who were convalescent, and for others whose special circumstances might render it desirable. There should be built on the land several cottages or detached houses, each with its own garden, and the various comforts of a private house; and the central building remaining as a depôt for those who require great care, for the demented cases who are so miserable to look at, but who will be as happy there as anywhere else, for the violent cases, for recent acute cases, and for those who cannot be trusted at all. In place of, as under the Gheel system, making the colony the rule, and having a central asylum for exceptional cases, the central building should be their main place and the cottages offshoots from it. They would be, as it were, private rooms removed from it for the sake of quietness, and if put down in the fields—still be on hospital ground and under hospital discipline. We thus start on what appears the just general principle, that insanity should be shut up, and then, as we are able, make exceptions on the nature of the particular case; instead of beginning with what seems the false principle, that insanity should not be shut up, and thus being obliged to make continual exceptions. It is to the establishment of a cottage system, under which some patients might have liberty without license, and might be under control without undue restraint, that the surplus made by any lunatic hospital as at present constituted might well be devoted.

This cannot be done, however, until an important obstacle is removed. By an act of parliament charitable institutions are prevented from possessing more than thirty acres of land; any quantity which they may have above that is forfeitable to the crown. Recently it was very desirable in the case of one public lunatic hospital to buy some land which lay very near to the building, and which would have been of great advantage to the hospital; but the land already owned was thirty acres, and so the purchase could not be made. It

is evident that a central hospital with its gardens, and a cottage system, will require more than thirty acres of ground.

If, then, in conclusion, the foregoing observations are founded on just principles, it must be obvious that it is not advisable to commence a benevolent asylum on anything like £3000, as the promoters of the Metropolitan Asylum contemplate doing. The result must be a painful struggle for existence on the part of a meritorious object under most unfavorable circumstances. Would it not be better to ask for £20,000, and to declare that the asylum will be constructed on the best possible principles, and will embrace the cautious application of the cottage system; that, furthermore, excellent accommodation will be afforded to those who can pay well; that the best medical skill will be obtained; that no one will have any selfish interest in the establishment, but that all profits will be spent upon the patients? Will not such a definite programme, and so just an appeal, draw forth a satisfactory response from the public? A provincial town raised £30,000 for the benevolent object; London and its neighbourhood will surely not refuse £20,000. It will not, however, do it in consequence of feeble, querulous advertisements, which breathe indecision and want of heart. Instead of the weakness of complaint, there must be definite aim in the purpose, system in the plans, and energy in the action; and then, assuredly, there will be reacting force elicited which will carry the project to the topmost heights of success.

On the treatment of Hallucination by Electrization.

By JAMES RORIE, M.D., Royal Lunatic Asylum, Dundee.

So much difficulty is experienced in producing the slightest alleviation of the sufferings of those affected with that form of derangement of the nervous centres which gives rise to what has been termed a *hallucination*, that the suggestion of any means by which this disease can be directly attacked, must be regarded as a decided advance in the treatment of this affection. Such a suggestion has recently been made by M. Baillarger, of Paris, in the recommendation of electrization.

As this mode of treatment is, however, still in its infancy, instead of discussing it at length, and entering upon its supposed mode of action, I will here at present confine myself to the description of the following case, in which I have found it prove successful :

W. T—, æt. 50.—Melancholia. Admitted 15th January, 1850.

History.—Married, and the father of a family; a mechanic. He is of the Presbyterian religion; common education, and nervous temperament. Originally of a cheerful disposition, sober and industrious habits, and average intelligence. The disease is of three months' standing.

Symptoms on admission.—He is reserved, melancholy, complains of being ill, and that he feels an impediment about his jaws when he speaks, and also at the root of his tongue. He has told his friends that he has felt both suicidal and homicidal promptings. He does not stand firmly upon his legs, and says that they are occasionally cramped. His lips are slightly tremulous, and he has an ulcer upon anterior aspect of left leg. The cause of his mental condition cannot be traced proximately. His father, however, suffered from melancholia. Tongue slightly loaded. Pulse 96; skin natural. Was treated with mercurial purges, &c., but with little benefit.

On October 16th, 1852, his symptoms were as follows: "Still suffering intensely from melancholia. He is tormented by the delusion that he is one of the monsters of iniquity alluded to in the Revelations, and that he is to be the means of bringing awful calamities upon the world. He can find no comfort, no consolation in anything, and wishes that he was out of existence. He says, however, that he cannot destroy himself. He seems to have undergone little or no change since admission. He refuses all kinds of aid, whether in the form of medicine or advice, and becomes very ill-natured if these be pressed upon him."

From this date to the 25th May, 1860, his malady appears to have undergone not the slightest change. His symptoms then were as follows: "very excited and miserable; says he is cursing God, and cannot help it."

June 7th.—Has been much excited for last three days. Is very melancholy, exclaiming, "Oh, God! what will I do!"

Has not as yet shown suicidal tendency. About this date he began to suffer much from hearing voices and noise in his ears. His sight was also considerably affected.

On the 29th October, 1860, he began to suffer from slight epileptic fits, which threatening to become more severe, he was put on a course of belladonna and quinine, which not only had the effect of removing his tendency to epilepsy, but also of greatly improving his general health. He continued, however, to suffer much from noise in his ears, hearing voices, &c., especially at night. As these symptoms gave him much uneasiness, and frequently prevented him sleeping at night, I resolved to try the effect of galvanism, and, accordingly, on the 28th May, 1861, I applied the wires to his ears, continuing a pretty strong current for about five minutes.

The effect during the application was greatly to increase the noise, the patient stating that it appeared to come from a corner of the roof.

On the 29th, the patient stated that after the operation he was free from noise in his head for about nine or ten hours, and that it recurred on his going to bed. The operation was again repeated for about seven minutes with a similar result, namely, total cessation of noise for a period of ten or twelve hours. The galvanism was accordingly continued for about ten minutes, daily, for a fortnight, the noise remaining away for a gradually longer and longer period, till it ceased returning altogether. Relieved from these distressing symptoms, the patient soon began to occupy himself industrially, and is now quite convalescent, having to a great extent recovered his former cheerfulness, to which he has been a stranger for eleven years and a half.

On the Pathological Elements of General Paresis or Paresifying Mental Disease (Paralysie générale). By DR. E. SALOMON. Translated from the original Swedish, by WILLIAM DANIEL MOORE, M.D. T.C.D., M.R.I.A., Honorary Member of the Swedish Society of Physicians and of the Norwegian Medical Society, Corresponding Member of the Royal Medical Society of Copenhagen.

INTRODUCTION.

General paresis, paresifying mental Disease, or in Latin *paresis generalis*, that is, paresis of mind and body, *insania paresans*, are terms applied to the form of mental disease generally known under the French denomination of *paralysie générale*.*

The synonyms of this disease are particularly numerous. Among the most important names in use with authors I may enumerate the following:—*dementia paralytica*; *paralysis generalis progressiva*; *paralysis progressiva*; *anopia paralytica*; (1) *dementia paralytans*. (2) The French have called it, *aliénation ambitieuse avec paralysie incomplète* (Bayle); *démence paralytique*; *folie paralytique* (Parchappe); *paralysie générale incomplète* (Calmeil); *paralysie générale progressive*; &c. The Germans term it *Geisteskrankheit mit Paralyse*; *allgemeine progressive Gehirnlähmung*; *paralytischer Blödsinn*; &c.

* "*Paralysie générale*" is a singularly inappropriate term; for he who is generally paralysed is certainly dead, and not living.

The English call it simply general paralysis. (3) General paresis* occupies a prominent place among affections of the mind, by reason of the great interest presented by this form of mental disease in a pathological point of view.

The knowledge we at present possess of this singularly constant morbid process, and its essential nature, may be regarded as a vantage ground, whence scientific investigation may advance in the still uncertain field of mental diseases.

Calmeil says :—"Le diagnostic anatomique des lésions, qu'on doit s'attendre à rencontrer dans les cavités crâniennes des individus affectés de périencéphalite chronique peut prendre rang parmi les vérités les mieux établies de la pathologie humaine." (4)

Even if this statement cannot be taken literally, it shows that the assiduous labour which has been bestowed upon the investigation of the pathological anatomy of this disease has not been without result.

In order at the present day to obtain the recognition of an affection as an independent form of disease, it is not sufficient to exhibit a certain group of symptoms; we must at the same time be able to show that these symptoms spring from one and the same source.

The pathology of every distinct disease must therefore consist of two parts: the symptomatic (or physiological), and the anatomical.

I shall make this division the basis of my essay and shall therefore commence with the symptomatic pathology, to which is appended a chapter on the differential diagnosis of the disease. I shall then pass on to the anatomical pathology, and shall conclude with an investigation of the essential nature of the disease.

I. SYMPTOMATIC PATHOLOGY.

I. SKETCH OF THE DISEASE.

In the very commencement of the cerebral morbid process which constitutes the subject of the following essay, the mind appears injured in the conditions fundamentally necessary to the normal discharge of its functions; it is diseased in its very root.

The degenerative process which takes place in the cortical substance of the brain, (5) prevents the normal reproduction and association of ideas; so that all combination, or any adequate comprehension of circumstances, the apprehension and conception of the most ordinary phenomena, are rendered impossible.

On this depends the peculiar change in the patient's behaviour: the astounded, vacant look, with which he glances around; the difficulty, or absolute impossibility of performing the simplest mental operations. The patient has scarcely swallowed the last morsel of a copious meal, when he demands more, assigning as a

* *παρεσις*, =paralysis incompleta, imperfecta.

reason that he has got no food during the entire day; he wishes to go to bed in the middle of a bright day, because it is evening, &c.

This stamp of devastated intelligence general paresis maintains during its whole course, whatever form of other mental disease it may assume. There is scarcely any form of mental disease under whose colours general paresis may not advance. Oftentimes it presents itself to observation as an eccentric, multiform, alternating ambition, with or without maniacal exaltation; very frequently it occurs with a melancholic state of mind manifest in the patients' outward demeanour. False ideas of external greatness are also to be discovered, although the patient does not spontaneously give utterance to them. The disease may likewise run on with an unmeaning loquacity, without any definite or typically marked delirium, and with alternating fits of exaltation and comparative calmness of mind. Some cases have been observed under the form of a more apathetic mental torpor, with intercurrent, rapidly transient ebullition of feeling and hallucinations of various kinds.

Notwithstanding that from the first commencement there is a decided diminution of intelligence and of the power of judgment, the frequently recurring states of exaltation, the constantly varying false ideas, hallucinations, and illusions, often present a remarkable variety in the disease on its first appearance. Even if we leave out of view the motor disturbance constantly attending the affection, paresifying insanity is thus distinguished from every other form of lunacy.

Accordingly as the cerebral disorganization advances, the active alternation of phenomena gradually diminishes, while the manifestations of the cerebral lesion become the most striking. The functions of sight and hearing do not in ordinary cases, when the disease is not very far advanced, exhibit any very remarkable change. But towards the close of the third stage, the power of hearing usually diminishes. In the rare instances in which the patient lives to the fourth stage sight and hearing become finally annihilated. Hallucinations (endogenous sensations) are not unfrequently met with in these senses. Smell and taste are often altered, so that the patient without repugnance submits to their operation the most loathsome things. Hyperæsthesia of the skin may possibly sometimes be observed, but it does not belong essentially to the disease. The sensibility of the skin often continues perfectly normal, even in the third stage; but in most cases it is blunted in some degree proportionately to the advance of the motor disturbance. This blunting, however (except in the fourth stage), never amounts to complete insensibility.*

The motor disturbances exhibit a vast number of changes and varieties. Even in the first stage, we observe more or less of transient

* The occasional suspension of perception must be distinguished from loss of sensibility.

convulsive movements (involuntary spasms) in the muscles of the face, especially in those of the upper lip. Sometimes the setting in of the disease is marked by sudden fits of vertigo or transitory attacks of an apoplectic character. Again, there is a more interrupted, involuntary, as it were, jerking movement in the lips; creeping sensations in the tongue (fibrillar convulsions in the muscles of the organ), when it is protruded; the patient betrays a certain amount of difficulty in expressing himself, evidenced by a laboured and catching mode of delivery, and a difficulty and occasional complete inability to pronounce words abounding in consonants, which require a more combined action of the muscles engaged in articulation. The patient still walks quickly, but sooner or later he experiences uncertainty in his gait also. It becomes insecure and staggering, causing him to walk with a feeble step and straddling stride (sailor's walk). This is more apparent when he is suddenly called and attempts to turn; the lower extremities now begin to give way under the weight of the body; the power of combination for its movements is interrupted. If the patient has advanced somewhat into the third stage, it happens that when he attempts to get out of bed his knees sink together, and he is for a time paralysed, but again recovers. After such attacks the power of motion in the lower extremities gradually diminishes, so that if he reaches the fourth stage he can no longer leave his bed. A similar condition occurs, in the progress of the disease, in the muscles of the upper extremities. In the last stage the muscles connected with the expulsion of the excreta and with deglutition no longer perform their office.

The vegetative functions usually continue rather long undisturbed. But with the gradual diminution of nervous influence nutrition also declines, and emaciation attains a high degree. In many instances an atrophied state of all the parenchymatous organs is met with on post-mortem examination. Of the diseases which interrupt the paresis, and cause death before the disease has reached the fourth stage, pyæmia, pneumonia, and colliquative diarrhœa, are the most frequent. Gangrenous destruction of the parts of the body exposed to more considerable pressure (the sacral region) is an almost constant phenomenon.*

The course of the disease may extend from some months to three years. In rarer cases it may reach to five years, but scarcely ever exceeds that time.

The disease belongs especially to full manhood, and in normal cases is not developed before the age of thirty years.

It may in general be stated that it occurs in persons who have lived too fast, and have fallen victims to enervating excesses. It presents a ready picture of premature old age (*senium l. marasmus præcox*).

* Cf. Joffe, in 'Zeitschrift Wien. Ärzte' 1857; 1, 2, 3, 5—1860.

France is the peculiar focus of the disease. The insatiable thirst after "la gloire" (outward distinction), which there more commonly than in other lands distinguishes the struggling young man, causes him to bend the bow too tight, and thus to be suddenly interrupted in his career. Paris is the head-quarters of the disease.

II. FORMS OF THE DISEASE.

We usually distinguish two separate forms or types, under which paresifying insanity occurs, namely, the *expansive* and the *depressed* form; of which the former has four varieties, the latter two. (6).

(A) *The expansive form* (l'affaiblissement masqué), generally occurs in men, and is distinguished by—

1. *The delusion of riches and greatness*, which gives the delirium a peculiar stamp. The false ideas are persistent, predominating, and of a progressive nature.

2. *Over estimation of one's own personality*; contentment and self-satisfaction; occasionally a rapidly transient expression of false ideas of riches and outward greatness.

3. *The notion of riches and greatness*, but with long intervals. The attacks supervene and disappear sometimes with the rapidity of lightning.

4. *A mixed expansive and depressed form*, with false ideas of riches and power.

(B) *The depressed form*, usually occurs among women and weak men.

1. *Melancholic type*.—The patient goes about with a depressed and sorrowful exterior, and when asked how he is, always answers, "I am exceedingly well." "First rate." Alternating delirium.

2. *Anæsthesia psychica*, characterised by a progressive decline of intelligence (stupidity).*

Under whichever of the above-mentioned forms the general paresis may occur, it is always and constantly attended with motor disturbances.

III.—STAGES OF THE DISEASE.

We recognise paresifying insanity under four stages of development:

1. The stage of Mental Alteration.
2. The stage of Mental Alienation.
3. The stage of Dementia.
4. The stage of Amentia, the character of which is paralysis of the mind=Dementia completa.

* To this belongs the seventh series of cases of paralysie générale incomplète in Calmeil—for example, No. 67. This is a very rare, and not generally recognised form.

1. *The stage of Mental Alteration.*

(A) *Mental symptoms.*—The mind in this stage undergoes a change, the patient's conduct differing from what characterised him before his illness. The change affects especially the patient's temper, character, energy, and intelligence.

1. The *temper* is so changed that, from being comparatively lively, equable, gay, and steady, it becomes—*a*, irritable and impetuous; *b*, morbid, dull, and careless about everything relating to the patient's self and those about him; *c*, sorrowful; *d*, childish and rash. (7)

In the patient's mode of life the change described under *a* manifests itself by his becoming troublesome to those about him, causing them often to experience the outbreak of a certain choleric irritability ("*manie congestionnaire*," Guislain). His morbid apathy prevents the patient engaging in any regular occupation. He neglects his duty.* His sorrowful humour gives rise to a retired and shy behaviour. His childish want of thought makes him constantly fall into extravagance, and leads him into undertakings and affairs which threaten, and too often actually cause, both his own and his family's ruin. The patient's actions are characterised by *leniter in re, sed fortiter in modo*.

2. The *character* (moral faculties) is so altered, that it becomes degenerated (moral insanity). The patient, even though he be a highly cultivated man, with fixed and settled character, becomes uncertain, dissolute, and dishonorable. He continues in the exercise of the duties of social life, but his surprised relatives mourn in silence over his indelicate acts, his dishonesty and debauchery. An honest man suddenly commits an open theft (8); so that he soon renders himself unfit for social life.

3. The patient's *energy* is changed, exhibiting a marked falling off. The power of deciding for himself diminishes; his acts are determined by external accidents; his conduct is so changed that from being steady it becomes extravagant.†

4. His *intelligence* is so altered that his power of criticism (judging of things in general) is diminished in comparison with its strength before his illness.

5. *Momentary absence of mind.*—The patient stops in the middle of a conversation, sometimes in the middle of a word, but continues, after some moments, the conversation from the point where the interruption occurred. He suffers, moreover, from a certain unusual dissipation of thought, and incapacity to collect his ideas.

6. *Forgetfulness* (=oblivion of what has just occurred).—This is a constant and important symptom.

* The representations of relatives against his irregular and whimsical mode of life have not the slightest effect ("*l'apathie raisonnée*").

† See the foregoing note.

7. *Morbid mobility and disquiet* in the patient's whole conduct, occasioned by the mental change.

8. *Indifference* in general to the subject for which in health the patient entertained a lively interest.

(B) *Paretic symptoms*.^{*}—The patient's capability of executing detailed movements diminishes. Movements *en masse* are performed with full power. Failing precision and diminished power of combination in muscular movements set in early.

1. *Speech*.—Alterations of speech are the first pathognomonic symptom of paralysis. The articulation becomes thick, loses in distinctness and precision, and suffers from a certain inaccuracy. Difficulty in plainly pronouncing some more complicated words, abounding in consonants, sets in.

2. The patient's gait becomes uncertain and tottering. He walks with a feeble step.

3. The handwriting is changed, the usual rounding being wanting. It becomes streaky and scratchy. The patient can no longer with his hands exercise any movements of a more complicated nature and which require much precision.[†]

During this stage the patient experiences involuntary spasms in the muscles of the face, particularly around the angles of the mouth and eyelids and in the upper lip. Rapidly transient attacks of vertigo. The pupils exhibit a constant contraction, not yielding even to diminished access of light (pin-point pupils). During the transition to the second stage maniacal seizures supervene (= "*manie congestionnaire*," Guislain), which, however, quickly pass off. In these attacks the patient is able to deal violent blows, &c., showing that in the strict sense of the word muscular power is not wanting, and that the muscles are not in themselves affected. Meyer has shown that in the attacks of mania occurring towards the close of the first stage the temperature of the vertical region is exalted. (9) Usually it is not until maniacal attacks have set in that the patient is considered to be insane. He is now admitted into an asylum, and is in the stage of mental alienation.

2. Stage of Mental Alienation.

(A) *Mental symptoms*.—The distinguishing characteristic of this stage is the confusion which, in consequence of abrogated power of judgment, the patient makes between his ideas and his desires, or his desires and ideas; he can no longer distinguish between them; they are for him quite the same.

^{*} The paretic symptoms in the first stage are only a bodily expression of the incipient paralysis of mind. The energy of the patient's movements is relaxed. The cause is central. Cf. *Gehirnlähmung*.

[†] All these signs are of importance, only by comparison with the practice in the use of his muscles which the patient had before his illness.

1. The stamp of decline and weakness in his psychical activity becomes more evident.

2. Mania, frequently under the form of the delusion of riches and greatness (= *monomanie des grandeurs*).

3. More or less frequent maniacal attacks.

(B) *Paretic symptoms*. — The *speech* is not merely thick and stammering, but laboured, and occasionally completely interrupted; the same syllable is repeated several times before the patient can articulate it. He stops short in the middle of a word, endeavours to pronounce it, but finds difficulty in doing so. He then becomes vehement, but the greater effort he makes to complete the enunciation of the word or sentence, the more impossible it seems to be. The movements of the tongue which, in the former stage, were unaffected, are now somewhat impeded; fibrillar spasms in the tongue are also observed.

2. The patient's *gait* is much more uncertain than in the former stage. He walks with yielding knees and a wide step, but does not on this account the less frequently knock his knees together. He is glad to use a stick, or endeavours to lay hold of something which may serve him as a guide. He never walks in the middle of a flight of steps.

3. *The movements of his hands* are more limited. He finds it hard at the first attempt to lay hold of what he wishes to seize. If he has succeeded in getting it, he retains it for a time, but soon relaxes his hold.

4. The patient's *figure* collapses and often becomes at the same time crooked.

During this stage the pupils are constantly unequally dilated. Sensibility is somewhat blunted.

The delusion of greatness (= *monomanie des grandeurs*) has by French writers been looked upon as a pathognomonic sign of developed general paralysis. This I consider not to be the case, for although the ambitious form of mental alienation is the most frequent, it does not constitute anything essentially fundamental in the morbid process itself. It is not this formal point of mental alienation which determines the disease, but it is the progressive diminution of mental energy, and the simultaneously diminished power possessed by the patient in the employment of his motor organs.

I consider the confounding of ideas and desires to be the characteristic element in the stage of mental alienation. The patient accidentally sees a well-known face. The sight has directed his thoughts to this person; thought and wish are the same. If he is confined, he endeavours forcibly to get out, for he wishes to meet the person in question. His unbridled fancy leads him to wish himself a millionaire, a king, &c.; the wish and thought are for him the same. He fancies he has millions and a royal crown. As reality

is for the patient of subordinate, or rather, of no importance, he soon finds himself in fact* a millionaire, a king, &c.

A persistent delirium belongs to this stage. That which it is of importance to bear prominently in mind is the gradual development of the false ideas until they have attained their culminating point. If the patient be a king, he becomes God, supreme God, &c. Another progresses from baron to count, king, emperor, &c. A poor person begins by suddenly finding that he is possessor of fifty or a hundred thousand rix-dollars; he soon acquires million upon million, &c. When the progression of the delirium has ceased, and the patient can no longer produce anything new, but lives exclusively upon the old stock of false ideas, he has arrived at the third stage.

In the transition to the next stage, apoplectic attacks occur as accessory phenomena, after which the patient's condition always declines considerably.

3. *Stage of Dementia.*

(A) *Mental symptoms.*—The characteristic of this stage is the patient's incapacity to produce new ideas. The delirium has from being more acute passed over to the chronic form.

1. The mind becomes gradually weaker, with a tendency to fully-developed dementia.

2 Incoherent repetition of reminiscences from the false ideas of the preceding stage. It is, as it were, a mechanical repetition of isolated words or short sentences, as for example, "million;" "I am king."

3. Failing memory of the patient's past life.

(B) *Paretic symptoms.*—1. The power of speech is extremely limited. Towards the close it consists only in the muttering of thick, indistinctly articulated noises (10). The expression of the face is vacant. Now and then a silly leer plays over the patient's otherwise motionless features. There is difficulty in putting out the tongue.

2. The patient's gait is slow and dragging; his course is zigzag; in walking he turns in all directions. Towards the close he chiefly lies in bed, and, for the most part, on the back.

3. The relaxation of his hands has so increased that the patient cannot retain anything in them.

4. Involuntary discharges set in towards the close.

5. Hearing, and subsequently sight, diminish considerably.

Nutrition, which had hitherto continued undisturbed, rapidly diminishes, notwithstanding that the appetite is still voracious.

* For the paretic with mental alienation a fact = the object of their fancy.

Bed-sores form on the sacrum and hips. The sensibility is considerably blunted.

As accessory phenomena epileptic seizures (convulsions accompanied with loss of consciousness) occur during and towards the close of the stage (11.) The patient usually succumbs in the course of this stage.

In some rare instances it happens, when the patient has been nursed with exemplary care, that he survives to the fourth stage of the disease.

4. *Stage of Amentia.*

This stage represents the highest possible degree of human degeneration. The man dies while still alive, for it is only the animal which breathes and assimilates. The patient has attained the stage of brutalisation.

(A) *Mental symptoms.*—The senses have in this last stage of the disease ceased to discharge their functions; the patient can therefore no longer have any sensations. Psychical symptoms are consequently absent.

(B) *Paretic symptoms.*—These have attained their culminating point. The patient no longer possesses the power of speech. He is unable to walk, nor can he move from his bed. At last he cannot even change his position but lies motionless upon his back. He can take nothing in his hands. The masticating muscles are paralysed. The food has to be thrust down to the commencement of the œsophagus. The muscles of the trunk are paralysed, so that respiration becomes extremely slow. The movements of the thorax are scarcely perceptible. The impulse of the heart is feeble, and is observable only on accurate examination. The food often gets into the trachea, and suffocates the patient; or, in consequence of paralysis of the pharyngeal muscles, a larger or smaller bit becomes impacted behind the root of the tongue and compresses the epiglottis. The temperature of the skin is low. The bed-sores spread deeply, and often reach the subjacent bony parts.

A coloured drawing of this stage would form a horrible picture. The wreck of the unhappy man lies dumb and immoveable as a sack of flesh.* The man is in the fullest sense of the word “out of his senses.”

Soon, however, death puts a long-wished for close to this extreme limit of human misery, as the patient is only a burden, a mass of fetid lumber here upon earth (12).

* “Comme une masse inerte.”—Guislain.

II. DIFFERENTIAL DIAGNOSIS.

We must, in the first place, distinguish paresifying insanity from other forms of mental disease; afterwards from other non-mental diseases in which paralytic symptoms occur.

1. *Paresifying Insanity compared with other forms of Mental Disease.*

If the pathognomonic paralytic symptoms have been recognised, there can be no confusion; supposing that these have not been duly apprehended, the question remains, how far the disease may be diagnosed from the psychical symptoms alone. This can undoubtedly to a certain extent be done. I shall endeavour to describe the most important elements in the diagnosis.

I do not consider that in the first stage the psychical symptoms present any reliable resting-ground. In the second stage the delirium is not specific with respect to its form; for ambitious delirium occurs not unfrequently in diseases in general. But in this form of delirium, in other mental diseases, the false ideas are fixed and unchanging (Conf. T. Fixerwahn). In paresifying insanity, the delirium is distinguished by an uninterrupted progress upwards to higher and more gigantic erroneous conceptions—in a word, it is a progressive delirium which is not met with in other cases. The character of confusion, or unity between ideas and desires, which I have stated as distinguishing the second stage, is peculiar to paresifying insanity. Mania paretica wants the character otherwise belonging to mania, of perfect intermissions. From the ordinary form of chronic dementia (= “*démence franche*”) it is distinguished by the fact, that in the latter the patients are perfectly silent, while paretics, on the contrary, rave incessantly. In other respects, the dissimilar courses of the diseases present a striking distinction between them.

2. *Paresifying Insanity compared with other non-psychical diseases in which paralytic symptoms exist.*

Under this head I shall speak only of apoplexy, chronic alcoholismus and paralysis from muscular atrophy.

1. *Apoplexy.*—In a slighter attack of apoplexy, where the paralysis affects the tongue, it is exclusively or predominatingly unilateral, on which account the tongue turns to one side when it is protruded. Hemiplegia, paraplegia, &c., present not the slightest similarity to general paresis, for in such cases the paralysis is complete in the parts of the body affected, and moreover is partial and not general.

2. *Alcoholismus chronicus*.—General paralysis has almost invariably been confounded with this toxical disease. Even in the present day French writers especially confound these diseases in consequence of insufficient acquaintance with chronic alcoholismus. (13)

The group of symptoms included under the denomination dementia paralytica belongs essentially to paresifying insanity, but it may also be met with in chronic alcoholismus, when the latter has attained a higher degree of development. A man may arrive at dementia in many ways; dementia with bodily paralysis he may reach especially through general paresis or chronic alcoholism. When the patient has already reached the goal, it may often be difficult to say immediately, from the existing symptoms, in what way he has attained to it; but when information is afforded as to the course of the disease, the decision is as easy as it is certain.

The principal feature of the differential diagnosis is to be found in the dissimilar starting-points of the diseases. General paresis proceeds from a morbid process in the fine membranes of the brain; chronic alcoholism from a general intoxication. In the former case the psychical symptoms occupy the first place: the degeneration of the mind tends to produce that of the body. In the latter, the paralytic symptoms are the first: the general intoxication of the body tends to the degeneration of the mind. The dissimilar etiological source of the diseases differentiates them in a decided manner. A person who has indulged in an excessive use of brandy at length becomes poisoned, and in consequence thereof, becomes the subject of chronic alcoholism, but never of paresifying insanity. If he has at the same time indulged in enervating excesses, particularly in those of a sexual character (14), he may, in addition to his chronic alcoholism, acquire general paresis.

3. *Paralysis from muscular atrophy*.—This disease has been confounded with paresifying insanity. If this mistake is still made, it is attributable to deficient scientific knowledge in the physician. The diseases have this in common, that in both progressive paralytic symptoms proceeding from the muscular system (occur paralysis progressive.) In other respects they are wholly dissimilar. In the one the seat of the disease is in the brain; in the other it is in the muscles. Paretic patients may, under the influence of delirium, employ their muscles in a very violent manner; such a patient may dash in pieces the door of the room in which he is confined. A person suffering from paralysis from muscular atrophy does not rave, and, in consequence of the degenerated state of his muscles, cannot be violent. (15)

III. PATHOLOGICAL ANATOMY.

I shall include the description of the pathological anatomy of the disease under four divisions, each being referable to a corresponding symptomatic stage ;

1. *Leptomeningitis chronica* (16) (= the stage of mental alteration).
2. *Periencephalitis chronica diffusa* (= the stage of mental alienation).
3. *Degeneratio substantiæ corticalis cerebri* (or marasmus substantiæ corticalis = the stage of dementia).
4. *Atrophia vera substantiæ corticalis cerebri* (= the stage of amentia).

That the disease commences with leptomeningitis of a chronic nature is proved by the fact, that in the cases where the patient dies in the stage of mental alienation, signs of a still persistent or recently terminated inflammatory process are met with in the pia mater (= lepto-periencephalitis*). If the patient dies in the third or in the beginning of the fourth stage, we constantly observe a change in the pia mater, the result of a preceding leptomeningitis. The process indicated under 2, is recognisable by the increased volume ("trübe Schwellung") of the cortical substance of the brain. The degeneration referred to under 3 has been demonstrated by Rokitsky. The atrophy mentioned under 4 is discoverable principally by the circumstance, that when the patient has lived to the commencement of the fourth stage, the most superficial portion of the cortical substance, corresponding to the lamina nervea in the healthy condition, is changed into cicatricial tissue, giving the sensation, on feeling with the point of the finger the now nearly obliterated surface of the convolutions, of a firm brain, and of a certain fluctuation of the subjacent dissolved cortical portion.

The honour of having demonstrated the anatomical changes in paralysis with mental alienation belongs to the Vienna school (Wedl, Rokitsky).

K. Wedl† has in every case of general paresis demonstrated an hypertrophy of connective tissue in the small arteries and veins in the pia mater and cortical portion of the brain. On the outer wall of the vessel is a hyaline, imperfect layer of connective tissue studded with partly scattered, partly grouped oblong or rounded nuclei. This layer of connective tissue, projecting over a greater or less extent of the vessel, undergoes, with the nuclei occurring in it, in the direction from without inwards (from the peri-

* A contraction of lepto-meningo-periencephalitis.

† 'Beiträge zur Pathologie der Blutgefäße.' Wien, 1859.

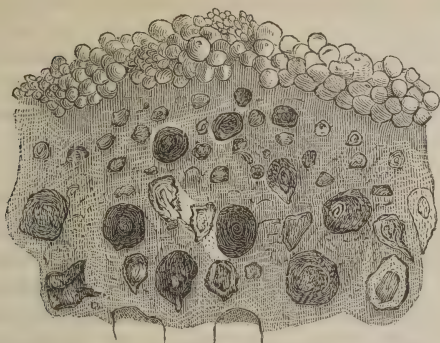
phery of the vessel towards its centre) a fibrillar change. The veins of capillary structure cannot resist the pressure, but are also drawn into this process, and are completely obliterated, and changed to corresponding bundles of fibres. The abnormal layer of connective tissue not unfrequently serves as a seat of deposit for finely divided olein and amorphous calcareous salts, while in other places calcareous depositions take place in the inner elastic and muscular layer. The small and slender cerebral vessels thus calcified can, on section, be observed in the cortical substance as a number of needle points. Wedl endeavours to explain the adhesion of the superficial layer of the cortical substance to the pia mater by the penetration of the grouped nuclei in the adventitious membrane of the pia mater to a certain depth into the cortical substance. When the pia mater is separated, a layer of the softened cortical substance often accompanies it, corresponding to the depth to which the nuclei have penetrated.

The complete obliteration of the calibre of the small veins caused by this degenerative process, demonstrated by Wedl, must give rise to a considerable obstruction to the circulation, both in the pia mater, and subsequently in the cortical substance of the brain, with consequent ischæmia;* to stasis, pressure, irritation, and inflammation. All this produces a progressive aggravation of the cerebral symptoms, and disturbs the nutrition of the cortical substance.

Rokitansky† has, in all genuine cases of paresifying insanity, demonstrated a considerable increase of the connective tissue enveloping the cortical elements. The pathologically augmented connective tissue is at first of a tough and viscid nature, and imparts to the cortical substance a somewhat looser consistence than exists in the normal state. The connective tissue subsequently, in the course of the disease, assumes a harder and more fibrous form. This excessive formation of connective tissue causes the breaking-up of the nerve-tubes. Those are first attacked which constitute the lamina nervea covering the cortical substance of the brain; afterwards those which horizontally traverse the same and separate the several layers of cortical substance; lastly, the degeneration attacks also the nerve-tubes, passing singly through the grey substance. The nerve-tubes broken up by the pathological process, are changed into colloid or amyloid granules (granular cells, granular bodies), which are met with in variable quantity in the extending connective tissue. The ganglionic cells of the cortical substance are often found dissolved, and in a state of colloid degeneration. See the subjoined woodcut (after Rokitansky) :

* Virchow—*ῥεχω* = to check.

† 'Ueber Bindegewebeswucherung im Nervensysteme.' Wien, 1857.



Colloid (and amyloid) metamorphosis of the cortical substance in a person affected with paresifying insanity. The pia mater is represented as separated with loss of a portion of the cortical substance. In the cortical substance, the superior white filamentous layer (*lamina nervea*) is replaced by a layer of colloid corpuscles of various sizes; under this separate colloid granules lie in a mass studded with numerous granular nuclei. Lower down are ganglionic cells swollen or changed to colloid bodies.

The cortical substance has split asunder, and (in the third stage) yields to the least touch. In the transition to the fourth stage, the superior layer (corresponding to the *lamina nervea* in the healthy state) is in a firm and tough condition. The inferior layers still retain their pappy and soft state. The convolutions are now nearly obliterated, and the mass of the cortical substance is diminished in volume.

In consequence of this pathological process, set in action by ischæmia, determination of blood, hyperæmia, or inflammation, the grey cerebral cells become destroyed, and changed to an inert mass.

The constant changes met with in every well-marked case of fully developed *insania paresans*, are:

1. In the *arachnoid*, results of previous inflammation in the form of condensation, diminished transparency, &c.
2. In the *pia mater*, results of previous inflammation appearing as opacity and condensation of the vascular membrane.
3. In the *cortical substance*, the consistence is looser than is normally the case. It is often pappy and soft.*

In addition we frequently have:

4. In the *dura mater*, results of previous pachymeningitis exhibiting themselves in adhesion of the membrane to the inside of the calvarium, thickening, &c.
5. In the *calvarium*, thickening and hyperæmia.
6. In the *sac of the arachnoid*, effusion of variable nature.

* When the patient has died in the beginning of the fourth stage, the cortical substance may appear resistant, and normal to the touch. The most superficial layer must in that case be removed, before the dissolved state of the subjacent tissue can be observed (17).

7. *Pia mater*, often intimately connected with the cortical substance.

8. In the *ventricles*, more or less abundant serous effusion. If the changes enumerated under 1, 2, or 3, are not met with, the patient has had some other disease than *insania paresans* (18).

4. *Essential Nature of the Disease.*

The disease, whose pathological elements I have above described, is a mental disease, and has all the characters pertaining thereto (*insania*). It is an independent form of mental disease, for it has signs, both symptomatic and anatomico-pathological, belonging exclusively to itself. These are principally mental and paralytic symptoms, going hand in hand, and being progressively developed, with a dissolved state of the cortical substance.

Mental disease, whose expression is a disturbance in the action of the human mind, cannot exist without a morbid change in the organ of mental activity, viz., the brain. In this change science must seek the cause and essential nature of the disease in an anatomico-pathological point of view.

Two views have been entertained with respect to the essential nature of the disease, namely, the French and the German.

1. *The French view* regards paresifying insanity as an inflammatory disease, arising as the result of irritation produced by repeated congestions, and causing a disorganizing inflammation. The anatomico-pathological names given by French writers to the disease refer exclusively to this theory, as for example, Bayle calls it *meningitis chronica*; Calmeil makes it a *peri-encephalo-meningitis chronica diffusa*; Belhomme calls it *meningo-cerebritis*; while Parchappe has proposed to term it, *cerebritis corticalis generalis*.

2. *The German view* declares the disease to depend, as is shown by demonstrated facts, upon obstructions produced in the vascular walls (in the *pia mater* and cortical substance) by degeneration (hypertrophy); with their results, ischæmia and inflammation. The primary cause, therefore, is degeneration of the vascular walls. Hence proceeds derangement of the circulation, with its consequent disturbed nutrition. The secondary cause is a spreading and destructive excessive formation of connective tissue in the cortical substance, leading to the destruction of nerve-tubes and nerve-cells.

As long-continued cerebral hyperæmia may exist, without being attended with degeneration in the vessels of the *pia mater*, and excessive formation of connective tissue, it is clear that something more must also be present. This additional element is supposed to constitute the peculiarity of the disease, and to be of a degenerative nature (19).

The diffuse periencephalitis (general paresis) presents incontestably

a striking analogy to diffuse nephritis (= morbus Brightii). The former is anatomically characterised by a degeneration in the tissue of the cortical substance of the brain, destroying the nerve-tubes and nerve-cells. Clinically, it is characterised by a profound alteration in the function of the cortical substance of the brain. The latter is anatomically characterised by a degeneration of the tissue of the kidney, and by alteration in the urinary canals and Malpighian bodies. Clinically, it is characterised by a profound change in the function of the kidneys. In both diseases we observe stages of hyperæmia, increase of volume, degeneration (softening) and atrophy.

In the present state of science we must lay it down that the disease we have been considering consists essentially in *a degenerative process in the adventitious membrane of the vessels of the pia mater, and in the tissue connecting the elements of the cortical substance of the brain (neuro-glia*), which degenerative process, in its development, causes the change of the grey cerebral cells into an inert mass.*

When the disease has attained its climax, the use of the animal muscles is completely abolished, and the vital process is deprived of mind—anima—(20).

APPENDIX AND REFERENCES.

1. The disease is thus called in the Asylum for the Insane at Prague. See Fischer, 'Pathol. Anatom. Befunde in Leichen v. Geisteskranken.' Lucern, 1854. This essay contains a review of the pathological changes in 318 bodies of insane patients who died in the asylum between the 18th of April, 1849, and the 30th of June, 1852. The post-mortem examinations were made under Professor Engel's superintendence. The results at which the author arrived are not very decisive.

2. This denomination has been proposed by Dr. Kjellberg, in his 'Clinical Lectures on Diseases of the Mind,' delivered at the Central Hospital, at Upsal, in spring term, 1861.

3. French medical literature of late years abounds in works upon general paralysis. In English there is only one separate work upon the subject, namely, Austin 'On General Paralysis;' London, 1859. In addition, we have papers by Dr. Conolly, in the 'Lancet' for October, 1849; Dr. Skae, in the 'Edinburgh Medical Journal' for April, 1860; and Dr. Harrington Tuke, in the 'Asylum Journal' for October, 1859. Of German authors Dr. Joffe has written best on the subject.

4. Calmeil, 'Traité des Maladies inflammatoires du Cerveau,' tome i, p. 484. Paris, 1859.

5. This term is borrowed from Florman. See his 'Systema Cerebro-Spinale,' p. 71. Lund, 1830.

* γλῖα=glue.

6. The following classification is chiefly after Brierre-de-Boismont. Compare his paper read before the Academie des Sciences on 24th September, 1860, and reported in the '*Annales Med. Psychol.*' 1861, p. 89.

7. "Childish manners contrasting with the habits of the subject. The normal man disappears; it is the child who exhibits himself." (Guislain, '*Leçons Orales*,' i, p. 339.)

8. "Every physician who has devoted himself to the study of mental affections has confirmed the fact of the existence of this tendency to theft in individuals labouring under general paralysis. But I have thought it useful to endeavour to make it as publicly known as possible, inasmuch as in courts of justice the presence of general paralysis is often overlooked, not only in its commencement, but even at an advanced period of its development, when there is not merely evident weakness of the intellectual faculties, but even thickening of speech and great difficulty in the articulation of words." (Dr. Sauze, "*Observations de Paralytiques condamnés pour vol.*" '*Annales Med. Psychol.*' p. 54. 1861.)

9. See '*General Progressive Cerebral Paralysis, a Chronic Meningitis*'—('Die Allgemeine progressive Gehirnlähmung, eine chronische meningitis')—A clinical essay, by Ludwig Meyer. Berlin, 1858.

10. Last autumn I saw in the Asylum for the Insane at Aarhus, a patient at the termination of the third stage of paralytic insanity lying in his bed, and mechanically muttering the following sounds:—"Hjoonn," "Khoonn," forming a bad substitute for the words, million, king (Konge).

11. "Almost invariably the last moments of the life of paralytic patients are attended with convulsions." (Esquirol, '*Maladies mentales*,' ii, 264. Paris, 1838.)

12. The fourth stage calls to mind the description of extreme old age given by the Swedish poet Stjernhjelm, in his "*Hercules*."

13. Morel, in his '*Traité des dégénérescences de l'espèce humaine*' (1) (Paris, 1857), says, in reference to this point, that since Huss's description of alcoholism, there ought to be no confusion between the latter and general paralysis.—"When medical observation has succeeded in elucidating as happily as the learned Swede has done, one of the departments of science, it is perfectly useless to question the results of works so conscientious. . . . It is no longer possible for us in the present day to confound chronic alcoholism with other idiopathic affections of the brain and spinal cord. The general progressive paralysis of the insane, when it has reached its ultimate limits, is, perhaps, the only affection, the differential diagnosis of which presents some difficulty" (pp. 79, 94). The knowledge of chronic alcoholism has of late years begun to spread among French physicians, but is still far from being so general as would be desirable and necessary. Conf. "*L'alcoolisme considérée à Charenton*"

(‘Annales Med. Psychol.,’ p. 565, 1859); and Thomeuf, ‘De la Folie alcoolique, Paris, 1859. Erlenmeyer—‘The Cerebral Atrophy of Adults’ (‘Die Gehirnatrophie der Erwachsenen,’ Dritte Aufl., Neuwied, 1857)—says in his introduction:—“A condition which might *sometimes* be confounded with it is chronic alcoholism, of which Huss has given so masterly a description.” The differential diagnosis between paresifying insanity and chronic alcoholism presents such a great abundance of interesting and, in a purely pathological aspect, important points, that it well deserved to be made the subject of a separate essay. The French writer on paresifying insanity who, in my opinion, is clearest on the difference between the latter and chronic alcoholism is Jules Falret. But he too has “run over the numerous cases contained in the work of Dr. Huss” (Jules Falret, ‘Recherches sur la Folie paralytique.’ Paris, 1853. Section on “Paralysies alcooliques,” pp. 107, *et seq.*)

14. “Sexual excesses have an especial tendency to terminate in general paralysis.” (Guislain, ‘Leçons Orales,’ ii, p. 64.)

15. In Lunier’s book, ‘Recherches sur la Paralyse générale progressive,’ Paris, 1849, most of the cases are either muscular atrophy with paralysis, or chronic alcoholism. Only exceptionally has the author met with a pure case of paresifying insanity.

16. This expression is employed by Lebert (‘Praktische Medicin,’ ii, p. 440)—λεπτός = thin, fine, delicate.

17. In every post-mortem examination of paresifying insanity, I consider it to be indispensably necessary that the cortical substance of the brain should in the first place be the object of a special and careful macroscopic investigation. At the same time microscopic examination ought not to be neglected. Parchappe says on this subject :

“Several times, if I had trusted to simple appearances, and if I had confined myself to the ordinary modes of examination, I might have overlooked the existence of the characteristic alteration. The meninges were healthy ; they separated from the surface of the brain without producing that decortication which usually reveals, on the slightest traction, the state of softening of the cortical layer. The surface of the brain was not altered in colour, its consistence appeared to be even increased. The brain, cut into slices, appeared perfectly healthy ; but a more accurate examination, and the adoption of a more efficacious mechanical proceeding enabled me, in these cases, to establish positively the softening of the cortical layer in its middle part. The handle of a scalpel, gently insinuated into half the thickness of the layer, succeeded, on cautiously raising the external portion of this layer, in detaching it through an extent greater than that in which the action of the instrument took place, and in this manner I obtained the decortication so easily effected, in the great majority of cases, by simple traction of the membranes.

"The efficacy of this manœuvre in demonstrating the reality of the existence of softening, is exhibited also in ordinary cases where decortication is produced by simple traction of the membranes. It is on a level with the free margin of the convolutions that this result is obtained. But it would be a great mistake to admit in these cases that softening exists only where decortication is produced by traction. Softening of the cortical layer exists also very decidedly in many points of the parts of the convolutions corresponding to the anfractuosités, and of the free margin of the convolutions, whence the membranes are detached without causing decortication. In all these points it is by raising with the handle of the scalpel the external portion of the cortical layer that we can establish on the fullest evidence the existence of softening.

"I believe that the instances of perfect integrity of the cortical layer of the brain in paralytic insanity, which have been adduced, are to be explained either by an error of diagnosis during life, or by the inadequacy of the modes of investigation after death."

The same writer further observes:—"As to the appeal which has been made to the microscope, as the only means of satisfying science upon the question of the seat of the general paralysis of the insane, I believe I may affirm, that for the solution of this question its employment is not indispensable. Doubtless, we may expect from microscopic observations much information and many advantages. I am convinced that microscopy will confirm, and it seems it has already confirmed, the inflammatory nature of the alterations of the cortical layer in the general paralysis of the insane." (Parchappe, '*De la Folie paralytique*,' pp. 17, 18. Paris, 1859.) In the estimate of the importance of the microscope with reference to our knowledge of paresifying insanity put forward by the author I cannot participate. The microscope has already proved the necessity for its intervention; without it, science had still remained ignorant of the change in the vessels of the pia mater. Without the microscope nothing would have been known of the excessive formation of the connective tissue of the cortical substance.

18. In this section only the substance of the subject matter has been put forth; all which is not plain matter of demonstrated anatomico-pathological fact is excluded.

19. Delasiauve has anticipated the degenerative nature of the disease; he assumes "*un germe détériorant à évolution fatidique*" Conf., '*Annal. Med. Psychol.*, p. 480, 1860. Wedl has demonstrated the degeneration. Calmeil considers that the disease is not of a degenerative nature.

20. I have in this essay employed the word *mind* (*sinn* = anima; sensus intimus) in the same sense as French writers employ the expression "*sens intime*." Conf. the title to Lordat's book '*De l'Insénescence du sens intime*' (=on the perpetual youth of the mind).

Animus signifies spirit, soul in the higher sense ; Ger. Geist. Animus is a spiritual and not a carnal idea. Of disease of the animus or soul we cannot speak in a medical or scientific sense. The circumstances which surround the soul fall within the range of speculative science, and belong not to medicine in the scientific signification of the word.

Personal Identity, and its Morbid Modifications. By J. CRICHTON BROWNE, M.D., Edin., L.R.C.S.E., Ext. Mem., late Senior President Royal Medical Society, Edinburgh; Assistant-Physician, Derby County Asylum.*

THE answer to Shakespeare's question, "What's in a name?" as conveyed in Juliet's subsequent remarks, is, at least in some points of view, unsatisfactory ; for placing aside all regard to beauty or euphony of sound, there is yet much either of good or evil connected with every name that rises to our lips or is silently repeated in our minds. There is, to a sensitive being, a pleasure or a pain connected with it, in which memory, experience, and association have wrapped it round. True, the pleasure or the pain may be of infinite and almost imperceptible minuteness, but it is nevertheless an atom in our emotional existence, and is added to the sum of our mental experiences. This is the case with the words used to designate the objects which surround us, but is more obvious with those applied to places which we have visited or known, and to persons whom we have encountered, or with whom we have been familiar. But the importance and significance of a name are most clearly appreciated and understood, when viewed with reference to the articulate sound by which we ourselves are called by our fellow men. This we will find, upon reflection, to be a very important part of ourselves, to be intimately united to our "dear perfection," and to adhere to us with wonderful tenacity, so that it is difficult to throw it aside. At the same time it is well known that a man may be legally stripped of his name, that on a sufficient payment, he may be permitted to denude himself of a beggarly appellation and to clothe himself in one of aristocratic splendour. Yet even after this has been formally accomplished, the savour of his rags will still, we opine, hang about him. The memory of his discarded title will still, ever and anon, come back upon him like vestiges of a state of former existence, and

* I owe an expression of gratitude to Dr. Hitchman for permission to avail myself of the cases in the Derby County Asylum, as illustrations for this paper.

will probably produce a mental confusion bordering upon double consciousness. Nor does it seem wonderful that a man's name should stick very closely to him and be difficult of divorce, when it is remembered how intimately it has been connected with all his conscious states from his very baptism, and how he has come to associate it almost indissolubly with the first person singular, the Ego, simple and concrete. Firmly grafted, as a man's name is upon his belief in his own personal identity, and being almost the sole expression of personal identity, as it certainly is, to many of the uneducated masses of mankind; it is not wonderful that it should be a permanent and persistent fact, difficult to be got rid of. For amongst the most fundamental principles of mind, is the conviction, out of which all names have arisen, that a man continues to be always himself; that he is at any given moment the same person that he was the moment before, and that he has always been, since he came into existence. This belief is, in fact, the very essence of mind, and arises necessarily out of the succession of momentary conscious states; just as corporeal identity springs out of a succession of material atoms endowed with certain vital functions.

There is such a thing as corporeal identity, notwithstanding the revelations of physiology and chemistry. It may be perfectly correct that our friend A. B.'s body is in no particle the same with that which he wore ten years ago. That may have been formed of the dust of Julius Cæsar, this may be framed of guano; and yet they are to all intents and purposes one and identical. We have an intuition to that effect, and who shall contradict it? Besides, is there not positive evidence? Are not the two bodies marvellously alike in general appearance and in minute detail? Do they not assume the same attitudes, do they not bear the same marks, moles, and nævi? Are they not liable to the same diseases? But still, there are no two particles the same; so that corporeal identity cannot be material in its nature, and must therefore consist in those forces determining the succession of atoms, regulating the nutrition and building up of the economy, and endowing each new particle with functions similar to those of its predecessor. When the influence of the nervous system in these particulars is considered, corporeal and mental identity are found to be very closely approximated to each other. The former, taken as distinct, must be extended to the vegetable kingdom; for plants have an identity of their own, which again is identical with life in all its manifestations, as in the animal kingdom also, but in plants of course, corporeal identity cannot be reflected in consciousness.

In addition to the corporeal identity of the individual which is, as it were, a variation, there is the corporeal identity of the species, for men do not gather grapes of thorns nor figs of thistles. In virtue of specific identity, the lilies of the field are arranged as in the days of Solomon, and the heliotrope turns as in the time of Homer.

But with corporeal identity in its various aspects, *per se*, we have at present little concern, the object of this paper being merely to point out a few of the errors of personal or mental identity, and to offer one or two suggestions regarding these. The consideration of such a topic may at first sight appear only a matter of speculative curiosity, and unlikely to lead to any profitable results, but on being more thoroughly examined, the subject will assume an importance of much greater magnitude. Not only are errors of identity matters of high interest to the psychologist, but, like all other delusions or mental perversions, they exercise a powerful sway over the sane or insane who are subject to them. They are sources of happiness or misery; they may oppose or facilitate treatment, and they complicate the operations of the physician, by demanding a special and consistent course in each case; a course so devised as to destroy the error, without impairing confidence, exciting suspicion, or inflicting pain. A consideration of them may also ultimately contribute to an elucidation of the mystery of mind, and may, I believe, in each case in which they occur, be made to aid somewhat alike in diagnosis, prognosis and treatment.

The personal identity, the affections of which are to be referred to, has been long a dark spot in mental philosophy, and may still be regarded as such. Various opinions have been entertained as to its nature and characters, and these have been evolved in erudite and protracted discussions. In modern times it has been usually looked upon as an intuition or an innate truth, but for my own part I am inclined to regard it, with a great physiological metaphysician of the present day, as a "fundamental belief," and consequently, in accordance with his theory and phraseology, a truth of experience. Applying the fundamental law of cognition to an explication of this question, we are forced to conclude that in an enlarged sense, not merely this single necessary truth of personal identity, nor even one or two others, but all truths are the result of experience. Consciousness itself is only an experience of the vital actions and changes perpetually taking place within us. We cannot be assured of our own existence as one out of relation to something else which we have experienced. The most elementary stage of conscious existence is, the division of the unity existence into the *me* and the *not me*, whilst the immediately succeeding stage is the subdivision of the *me* into mind and body. Sir William Hamilton says, "We think one thing only as we think two things mutually at once," and hence personal identity "is the consciousness of existing continuously, as one derived from the continuous operations of the vital forces which constitute the living body into one."* But the teleorganic changes upon which the fundamental belief of continuous personal

* 'Mind and Brain,' by Professor Laycock, vol. i, p. 210.

identity depends are reflected in the consciousness as verities, as for the time being they have the character of necessity. The element of so-called necessity, however, is not confined to conscious conditions, but is coextensive with existence; for a man cannot *will* to alter his stature or to possess additional limbs. The belief in personal identity, then, may be regarded as one of a series of fundamental and necessary ideas, with which the faculties *must* be invariably occupied in all actual states of consciousness, and which are the necessary casual elements of all thoughts and actions. It is the result of the teleorganic changes in the encephalon as a whole, and is correlated with the past and the future. In consequence of its origin from teleorganic changes it *must* have this correlation. For every action or change of this description has an antecedent or cause which represents the past, and an object or design which implies the future. Thus it is that the fundamental belief in personal identity unites the links in the chain of consciousness, or, to speak more correctly, is itself formed out of this union. It is accordingly an *absolute identity* in the strictest sense of the term, consistent, at the same time, with innumerable diversities. In the progress of life, from the cradle to the grave, the same being exhibits innumerable and diverse mental manifestations. He slumbers in listless apathy, and is stirred by mighty and restless energies. He is fired by enthusiasm, softened by benevolence, or debased by malice and vice; and yet, through all these infinite changes, one thread of harmony prevails, which is often *not* lost, even when the "sweet bells" are "jangled out of tune," and which tells of unity and sameness in diversity. Yet there are times when even this is lost or altered, when the mind passes into another alotropic form, just as the diamond, which retains what may be called its identity, in its rough and polished state, as it flashes in a coronet or lies hidden in a mine, loses it when it is converted into amorphous carbon. This change in personal identity takes place when the corrigent sequence of teleorganic changes is interrupted, or when there is an interference with that play of external impressions which is required to evolve an intuition into a derivative truth. When this play of affinitive impressions from without is cut off, by what is termed functional or structural disease of any portion of the encephalon or of other organs, so that it cannot influence the intuitive substrata, then the changes that take place are not correlative with true belief. The aberrant change of one moment is not corrected, under these circumstances, by the change of the succeeding moment. Thus, false convictions, of the most extraordinary nature, take possession of the mind. Personal identity has been already declared to be in relation to the changes in the encephalon *as a whole*, and it is, therefore, subject to modifications, in accordance with healthy or morbid encephalic conditions. There are, therefore, morbid modifications of personal identity, but

these are not, perhaps, so frequent as some have declared. It becomes important to point out those other states with which they have been confounded.

Now, it has long been the practice to enumerate as modifications of personal identity, a number of erroneous convictions which, upon examination, will be found to have quite a different nature. The vagaries of the hypochondriac and the delusions of the monomaniac have been thus regarded, and individuals who have declared themselves to be teapots, animals, emperors, or angels, have been classed by eminent psychologists with those affected with morbid changes in the feeling of personal identity. This feeling, however, seems to be scarcely at all involved in such delusions, and is, indeed, as has been already said, much more rarely abrogated or destroyed than would, at first, be imagined. A patient who believes himself transmuted into some brute or inanimate object, does not lose the consciousness of continuous self-existence, does not confound, as a general rule, his former history with his present convictions, or cease to believe that he ever was something that he is not now. Where rank, wealth, and power are arrogated most pertinaciously, the patient carries with him into his new condition, usually at least, all his antecedents, his loves, his hatreds, his mental peculiarities. He is found explaining and defending the incongruities and inconsistencies which his pretensions involve, or industriously removing difficulties which obstruct his own belief, even where that is strongest, or where it would have been attested and maintained in former and darker ages, on the scaffold or at the stake. It is remarkable, too, that there is no repudiation or forgetfulness of prior experiences, but that there is rather the impression of a progression, of a change, of an intervention of divine or diabolical power in bringing about a transformation. That there is no interruption in the train of thought constituting a patient, entertaining such fixed delusions, the same person that he was before the change took place, was well illustrated in the case of a gentleman whom I have examined. He was a well-educated person, but cherished the inexpugnable delusion that he was the Almighty and the Son of God. He pointed out his apostles, correctly adduced his own genealogy as a proof of the accuracy of his statements, directed attention to a cicatrix in his side as the work of the spear; to scars on his brow, produced by his own fingers, as the wounds of the thorns, and, in writing to his wife and relations, whom he properly addressed as such, subscribed himself God. Here was a strange admixture of reality and fiction, exhibiting unmistakeably the unbroken continuance of the patient's intellectual life, and the transference of the feelings and cognitions of his healthy into his diseased condition. This gentleman, too, though signing himself "God," politely replied when addressed by his proper surname, and habitually deputed himself in a manner inconsistent with a change in personal identity corresponding to the belief which he professed.

Thus it is also with the majority of persons similarly affected. They do not act as they assuredly would act if they had altogether thrown aside their former selves and put on a new personality. It is no uncommon thing in an asylum to see an emperor of Russia brushing shoes, or a queen with vast dominions scrubbing a floor—branches of industry not likely to be followed by those feeling within them the assurances of royalty. The emperor, too, if led into conversation, will speedily let you know that he has not lost all remembrance of his former character, or of the surroundings among which he lived before assuming the imperial purple, while the queen will probably fail to understand that there is any incongruity between her pretensions and her occupations. I have seen patients who have held that they have been deprived of their souls and transmuted into the mould of the grave-yard, complacently partaking of dinner, performing all the functions of life, and conversing about incidents which occurred previous to their supposed extinction.

There are, no doubt, cases of insanity in which the insane notion is so prominent as to obliterate all recollection of the healthy period prior to its incursion, in which the sufferer will deny that he ever was anything else than what he now maintains himself to be. A person thus afflicted may refuse to recognise his relations or to answer to his own name. He may deny all knowledge of the true circumstances of his past career, and describe other circumstances in harmony with his dominant delusion, as having characterised it. But ever here there need be no involvement of personal identity. The delusion has no other foundation than an error of intellect and memory, internal assurance being rarely urged in its defence. The acquirements of the previous life are still made use of, the habits of thought and action continue unaltered, the occurrences of the past are still sometimes unwittingly referred to, and the man himself does not allege that his identity has been interfered with. The assumption, however, of such a form by a delusion, I would be inclined to regard as of unfavorable omen, and as indicative of the progress of the physical lesion. I have more than once observed that in general paralysis the advance of the disease is marked by the gradually increasing repudiation of a man's real circumstances. A patient in whom the delusions are not of a very varying character, in the first stage of general paralysis may call himself, John Smith, or Thomas Jones, as the case may be—Prime Minister of England; while in the second stage he may introduce himself as Lord Palmerston, Prime Minister of England, at the same time admitting that he was once John Smith or Thomas Jones. Later again in his illness, he may still call himself Lord Palmerston, but will scorn the idea that he ever bore a cognomen less known to fame. I have noted several cases in which the delusions of the general paralytic underwent changes analogous to those described, and in all of them the disease proceeded rapidly and steadily to a fatal issue.

Lately I have had under observation in the Derby County Asylum two cases which I may allude to, as illustrations. In one of these the affection had just developed itself, and the man represented himself as S. P— (using his own name), Proprietor of England. In the other, the morbid state had existed for above a year, and the man spoke of himself as George IV, proprietor of England. In imitation of Leuret's experiment with the two patients under his care, calling themselves the Holy Ghost, I confronted these two men, and pointed out to each of them how absurd it was to suppose that there could be two proprietors of England. The result of their interview merely was, that the man in whom the disease was more advanced, spoke of the other as "a poor beg-gar," and continued to assert his own proprietorship, whilst the other, in turn, pronounced him a madman, deplored his insanity, expressed a hope that he would get better in the next world, as he certainly never would improve in this, and informed me a few days afterwards, that he had discovered by a mathematical calculation, that the "poor madman would recover in 133 years, the period of the resurrection."

In some instances of so-called brute madness, there is, as I shall hereafter endeavour to show, a modification of personal identity, but this form of alienation ought not to be characterised as a whole, as a perversion of that belief. Many cases of it are subject to the explanations which have already been given, with reference to delusions in general, and others are liable to misinterpretation.

A girl recently under treatment, was supposed to have a change in personal identity, and to fancy herself a brute, because regularly during the night she emulated the cries and attitudes of animals, such as dogs, lions, and cats. Since her recovery, she has explained that she never entertained such a notion, but that she conceived herself attacked by vermin and dangerous animals, and that she therefore imitated the creatures that prey upon these, in order to keep them at a distance.

Altogether, then, it would appear that errors of identity in the ordinary forms of mental disease are rarer than some psychologists have supposed. This fact was appreciated by the philosopher Brown, who, when speaking of the distinguishing marks of a belief in our continued identity, says, that it is "so universal that even the very maniac, who conceives that he was yesterday emperor of the moon, believes that he is to-day the very person who had yesterday that empire."* It may also derive confirmatory evidence from the experience of each one of us in dream-life. Dreams are in many respects the analogues of insane delusions. They lift up the veil, as it were, which would otherwise obscure the mental condition of the madman from the man of sound mind. They enable us, so far, to

* Brown's 'Lectures on the Philosophy of the Human Mind,' Edin., 1828, lect. xiv, p. 83.

comprehend the nature of delusions. In them the senses being inactive, impressions from without are not received, and cannot therefore exercise a regulative influence over the vital changes in the encephalon, which cannot therefore correspond in law of sequence to external phenomena. As the result of this, the relations of the individual in time and space are lost, and all checks upon the action of the brain being removed, it follows its own devices. The dreamer has presented to him the most wild and incongruous processions of persons, things, and events. To him space is as nothing, and time is no more; so that centuries may be crowded into moments, and a belt put round the world in less than forty seconds. Yet how seldom is it that the dreamer experiences any impairment of personal identity. He may be parched in the Sahara, frozen on polar icebergs, elevated to the seventh heaven or sunk into a demon-peopled abyss of darkness; but he is still himself. Several nightly dreamers, who have grown gray dreaming, assure me that they never remember to have experienced any loss or change of personal identity in dreams. The fact is, that the dreamer rarely indulges in any kind of self analysis. There are a thousand objective for one *subjective* dream. If, then, such cases are thus infrequent in dreams, we have a sort of presumptive ground for concluding that they are equally infrequent in the common types of insanity.

Where then, and under what circumstances, it may be demanded, do errors of mental identity arise? How are they to be recognised, and when recognised, treated? In replying to these questions, it may be first remarked that errors of identity are of three kinds, or at least may be artificially divided into three groups. First, errors in which there is an abolition; second errors in which there is a perversion; and third, errors in which there is an exaltation of the feeling in question. As we are now only occupied with morbid modifications, it would be out of our course to inquire whether, as some have alleged, there is an abolition or rather a suspension of personal identity in ordinary profound sleep. This inquiry would lead us into the consideration of a subject still warmly contested; the unbroken perpetuity or intermittence of consciousness; the decision upon which would at the same time decide the query as to personal identity. But without examining the condition of personal identity in sleep, it is necessary for us to refer to a temporary abolition of it which frequently occurs in the condition between sleeping and waking. This most generally occurs when sleep is suddenly broken in upon, and is undoubtedly abnormal in its nature. The sleeper starts up, and is perfectly conscious, for he looks round him and sees every neighbouring object with ordinary correctness, but though perhaps in his own chamber, and looking upon a familiar scene, he cannot conceive where he is, neither can he conceive who or what he is. Every sense is awake and active, but the mind cannot grasp its relations. In many who experience it, this state is

accompanied by a vague sense of apprehension and alarm, by palpitation, and by a restless movement of the hands, which are passed to and fro as if in an effort to lay hold of something tangible. This state rarely lasts for more than a few seconds, recovery from it being sometimes accomplished *per saltem*; the sufferer springing, as it were, at once from oblivion into intelligent being, in a way defying all explanation. In other instances, again, the restoration to normality is more slow and gradual. Some particular object is fixed upon; its particular relations are at length apprehended, and the truth then dawns upon the mind. A gentleman at one time, very subject to them, has told me that he found in his own case the speediest way to free himself from those terrors which were very disagreeable to him, was to have his own *name* printed in large letters, and hung up at the foot of his bed. Whenever his eye fell upon this, he was at once recalled to himself. It would be very difficult to say upon what physical condition such states depend. They may be due to a change in the cerebral circulation, but then why should not perception be also in some way involved? They may also be accounted for by supposing the brain, or a portion of it, to be labouring under a certain form of shock produced by a sudden discharge of accumulated vis nervosa. Whatever be their physical cause, they most commonly attack the nervous and excitable, those prone to every psychical ailment.

Another affection of personal identity, closely allied to that just described, has been noticed in a youth whose case has been long watched with peculiar interest. He is of the neuro-arthritic diathesis, and several years ago, when he was about fourteen years of age, began to experience sudden and painful attacks, which were chiefly characterised by a loss of personal identity. According to his own description these attacks came upon him always unexpectedly, principally when he was alone, after some intense mental exercise, or the day after some great excitement. There were no premonitory symptoms, the loss of personal identity being the first indication of illness. The patient declared that he felt his identity passing from him, that he lost himself, was unable to remember his own name, or the position which he occupied in the world, that there was a slight dimness of vision, and intense and uncontrollable fear lest he should not "get into himself again," and that this was followed by very violent palpitation. Whenever the attack came on, he was impelled to rapid movement, and went as quickly as possible into the presence of other persons, as he generally became well at once when addressed by any of his friends. When I say got well, I mean only so far as his mental symptoms were concerned, for palpitation and feelings of uneasiness continued for a considerable period after each attack. The attacks, which were at very irregular intervals, most usually occurred in the evening, though they occasionally happened in the morning, and at other hours. At first it was thought by the physicians who attended

the case that the attacks were connected with the period of puberty, but as this passed, and the illness continued unaltered, various courses of treatment were tried, but without any decided effect. At length, after the patient had attained his eighteenth year, preserving tolerably good bodily health, the attacks began to diminish in number, and are now of the very rarest occurrence. One enlightened physician who watched the case, and who knew the constitution of the patient, expressed his belief that the attacks were connected with irregularity of the heart's action. The patient's pulse had intermitted more or less since birth, and the physician thought that immediately prior to each attack there was an intermission so considerable as to affect materially the cerebral circulation, and the changes dependent upon it, and that thus the mental symptoms, the loss of identity, and the fear, had their origin, whilst these again reacting upon the heart excited it into violent action, and thus produced the subsequent symptoms. It is worthy of remark, that as the attacks became less frequent, so did the heart's action become more regular.

There are in every asylum patients who are so entirely "lost" in appearance, who have such a vacant expression of face, who move about so restlessly, and who give so few indications of the possession of identity, or of any comprehension of their worldly position, as at least to justify the suspicion that they are permanently in the condition which I have just referred to as a fleeting and transient attack. What the real mental state of such patients who are commonly called demented, is, we have no grounds for judging, any more than we have data for deciding as to the conscious conditions of individuals in trances or in cataleptic seizures, should they be conscious at all.

These modifications of personal identity, which have been briefly touched upon as errors by impairment, consist in the negation of vital properties in contradistinction to those which remain to be considered, which arise out of an excess or alteration of the same vital properties. The former bear the same relation to the latter, that anaesthesia and paralysis bear to spasm and convulsions. The distinction, however, in the present case, is not so broad and palpable, for all the modifications alluded to, may be said to depend upon morbid changes in the nutritive and interstitial processes in organs whose function it is to perform the vital acts of which under ordinary circumstances, personal identity is the expression. The distinction is artificial, and is simply a matter of convenience, for it is probable that the nutrition changes, which in health produce personal identity, as the vital effect, reflected in consciousness, occasion both negative and positive abnormal conditions of the same, when augmented in degree, according to the intensity of such augmentation.

Retaining, however, the distinction for convenience sake, and turning to the other divisions of the modifications of personal identity, we are encountered at once by a deeply interesting condition

which invites, but has hitherto defied, the investigations of the psychologist. In it personal identity is altered, for the individual is separated into two distinct beings. He feels the promptings of two different natures; he remembers two different trains of thought, and conceives that he is two persons at the same time, or at different times. Or, which is more rarely the case, but more immediately connected with this inquiry, all remembrance of the one state is lost when the mind passes into the other, and the two periods of existence are in no way bound together by consciousness or memory. One of these states may be healthy, characterised by the exercise of sound sense and generous affections; the other may be diseased, disfigured by folly or passion; or both may be diseased, but distinguished from each other.

The further consideration, however, of this most instructive duality of mind, together with the consideration of the other modifications of personal identity, must be deferred until I have next the opportunity of saying a few words on the subject in the 'Journal of Mental Science.'

(To be continued.)

Excerpta from Foreign Journals. By DR. ARLIDGE.

IN our last abstract from German and French works, we noticed the appearance of two new French journals devoted to psychological medicine, and made some general observations upon the character and purpose of each as set forth by their respective editors. We have now collected the numbers for the whole of the past year, and will attempt to cull from them what appears likely to interest our readers; and as the subject matter before us is on the present occasion to a large extent of a clinical character, our excerpta must largely partake of the same, a circumstance which we trust will not render them the less interesting.

The 'Archives Cliniques des Maladies Mentales et Nerveuses,' edited by M. Baillarger, is, as its title imports, restricted to the recording of clinical observations. The monthly numbers collected together for the past year form a volume of 575 pages, and contain numerous well narrated cases of great interest. And with this collection before us, proceeding from the industry and research of the asylum physicians of France, we cannot avoid lamenting that no similar attempt to give the results of observation and experience has been yet made by the superintendents of our asylums in Great Britain, although they have this journal to serve as a most appro-

priate medium, a field of observation quite as extensive as their French brethren, and institutions in which they take pride as unsurpassed in the civilized world. If psychological medicine is to make progress, and to keep pace with general medicine; if its obscure pathology is ever to be cleared up, and its therapeutics to be placed on a more rational and efficient footing; it must, as a science of observation, attain these advantages by the combined labours of its disciples in observing and in recording the fruit of their observations. Even these comparatively few reports furnished by our fellow-workers in the asylums of France, afford opportunities for the comparison of cases presenting similar pathological phenomena, for collecting hints as to the psychological changes attending them, and for supplying suggestions in the matter of their medical and moral treatment. What might not be effected in the ample sphere for observation existing in our own asylums, were their medical officers to take up the study of selected cases under their charge, and to detail the result of their labours for the benefit of others? certainly, some such thing is done by a few superintendents, who publish short notices of interesting cases in their reports; but this work is of a casual and incidental nature, for it is rarely that cases are recorded on any pre-arranged plan, or to illustrate any presumed hypothesis or fact. Moreover, the cases, however valuable or curious, so printed, are virtually lost, for the pamphlet-like report is a privately circulated document, it falls into the hands of a few only, and in its mongrel character of a report on the building projects of the year, the medical transactions, the religious history, and the financial and domestic returns, it rarely so far finds favour with its recipient as to secure its perpetuation and careful deposition in book-covers on his library shelves.

These remarks are a digression from the business we have in hand, though suggested by the journal under notice, yet we feel that every well-wisher for the progress of English psychological medicine will pardon this, and unite with us in the desire to see more concerted action among English asylum superintendents in its clinical study, and in the collection of facts from the vast field of observation at their command.

Hypochondriasis as premonitory of general paralysis.

Asylum superintendents have for years past noticed the occasional association of melancholia with general paralysis, either during a part or the whole of its course, but M. Baillarger goes much farther in endeavouring to show that a form of hypochondriasis is a frequent prelude to its first appearance, and symptomatic of it. A brief paper in support of this hypothesis was contained in the 'Annales Medico-Psychologiques' for 1860 (p. 509), and several illustrative cases are

reported in the 'Archives Cliniques' for 1861, by M. Baillarger and other physicians. M. Baillarger asserts that the connection of hypochondriacal delirium with paralysis is close, and may serve as a diagnostic of the precursory stage of the latter malady. At the same time, he adverts to this association not as constant but as frequent. Such hypochondriacs usually agree in the character of their delusions, which refer to partial or entire changes in their bodily structure, to destruction of organs and functions. Some assert they cannot swallow because the œsophagus is closed; others that their bodies are in a state of decomposition wholly or in part; others that they have lost the faculty of vision, or of some other sense, or the power of locomotion, whilst some will maintain that they are actually dead. Moreover, a distinction is attempted between this and the ordinary type of hypochondriasis, and also between it and the delirium of melancholy not uncommonly seen among paralytics. Such hypochondriacal symptoms in paralytics are unfavorable as to prognosis; the disease advances more rapidly, is more speedily fatal, and complicated with a greater tendency to gangrene of the tissues.

In these views M. Baillarger has received the support of M. Legrand du Saulle, who carried on a discussion with M. Linas respecting them in the 'Annales Medico-Psychologiques' for 1861. S. Casimir Pinel in the 'Journal de Médecine Mentale' (1861, p. 15) disputes their correctness, and considers the existence of a *special* hypochondriacal delirium, separate from ordinary hypochondriasis and from melancholia, not established. On the contrary, he believes that a delirium marked by mental depression, assumes at one time a hypochondriacal, at another a melancholic form, and that at other times the two forms occur simultaneously, and further, that this mental state may alternate with the expansive delirium, and precede, accompany, or follow general paralysis, without furnishing any positive ground of diagnosis.

In reading over the cases of general paralysis recorded in the 'Archives Cliniques,' we find twelve in which hypochondriacal or melancholic symptoms were associated with it. Of these, four presented at their outbreak symptoms of melancholia or of hypochondriasis. The first of these was that of a man, æt. 35, who, after a short period marked by numberless extravagances and follies, fell into a state of mental prostration (torpor), with melancholia, remarkable especially by the complete absence of the power of the will, and by hypochondriasis, with the delusion that he was dead, or dying, or was deprived of his limbs. Dirty habits, a suicidal tendency, and refusal of food followed, but after six months his reason and health were so far restored that he was discharged recovered, and resumed his occupation. Five months afterwards he was readmitted, but at this time, the mind was in a highly excited condition, and his delusions were of an ambitious character, and the symptoms of

general paralysis became more and more pronounced. In this state he lived a year, melancholic delusions from time to time intervening, until dementia became fully developed.

A second case occurred also in a man thirty-five years old. Long immersion in water at first induced an attack of aberration, marked by distressing delusions and a suicidal impulse. After three months he was so far improved that his friends removed him from the asylum, and he entered again on his occupation. However, instead of manifesting a coldness and dulness of character as heretofore before his illness, he was unusually gay and loquacious, and pursued his avocations with excessive ardour and at the cost of great bodily fatigue. A fall from his horse, attended with a great fright, about a month after his discharge, produced a state of unconsciousness with general convulsions; and from that time epileptic fits continued to recur. His conduct now became dangerous to others, and very shortly the physical signs of general paralysis made their appearance, without, indeed, the ambitious delirium generally accompanying that disease.

In the third case, the existence of general paralysis was not positive. The patient was twenty-seven years of age, and attacked suddenly with acute melancholia and a tendency to suicide. From this state he recovered after the lapse of three months, when again, nine months afterwards, he was seized with a maniacal attack; was noisy and incoherent, and in his ravings talked of the immense wealth he possessed, of his high dignities and magnificent projects. His speech became rather embarrassed, but the question arose whether this was not attributable rather to the overflow of ideas crowding his mind, and the inability of his organs of speech to utter them fast enough. Yet the course of the disease was in many respects abnormal, and the pupils were unequal. In about four months after his admission the maniacal excitement abated, he gained flesh, and the physical symptoms of paralysis decreased, although the ambitious delirium persisted. Three months afterwards there was a sudden improvement, which having continued, he was discharged recovered from his mania and the paralytic symptoms.

The fourth case is narrated by M. Baillarger himself. It was that of a woman aged forty, who for eight months before her admission into the Salpêtrière suffered very marked hypochondriasis. When admitted, there was great mental excitement, and in a day or two the symptoms of general paralysis were observed in the hesitation of speech, unequal pupils, and obtuse sensibility. The same fancies about her health persisted as before for a time, but before the end of the first month of her residence in the hospital, she became more calm, and very shortly afterwards she went out recovered. She subsequently presented herself to the authorities as quite well, with her mind clear and her speech unaffected.

On looking over the narrative of these four cases, the hypochon-

driacal delirium insisted on by M. Baillarger as a precursory diagnostic of general paralysis, can be predicated of two only of them; viz., in the first and last. In both these, recovery took place to a greater or less extent after a short time, followed in the former by a speedy relapse, when general paralysis for the first time manifested itself. In the last case the restoration to health continued at the date of its report, but it may fairly be questioned whether it was at any time a case of general paralysis. The woman had absurd fears about her health, and acted extravagantly wildly in consequence of them, but such were not symptomatic of paralysis. The hesitating, difficult, and jerking speech, unequal pupils, and diminished sensibility, might or might not be symptoms of the disease; and in deciding this point, it is necessary to notice that she was guilty of self-abuse, and that there were daily intermittent attacks of agitation in the afternoon, a circumstance most probably dependent on the former, as well as, we are disposed to think, much of the impediment of speech and diminished sensibility. On this point we may quote a remark by M. Baillarger himself (*'Ann. Medico-Psychologiques,'* 1862, p. 5), namely, that "we must be on our guard in concluding that general paralysis exists on account of embarrassment of speech; and that in all cases it is necessary to have the lesions of intelligence distinctly manifested."

In the eight other cases, where hypochondriasis or melancholia was associated with general paralysis, it was an after event, and when the disease was fully established, after having been ushered in by maniacal excitement, or at least by extravagant conduct and notions. In two of the instances narrated, the early history was not known, the patient coming under the narrator's observation when dementia and paralysis were manifest. In neither of these, therefore, can a precursory hypochondriacal delirium be predicated. In another, ambitious delirium alternated with melancholic delusion; in another, again, recovery ensued after a maniacal attack, and then followed melancholia and paralysis. Two other cases in which maniacal excitement attended the development of the paralysis, and melancholia afterwards supervened, are worth a particular notice, inasmuch as they occurred in two brothers, nearly at the same time; the succession to an inheritance being the apparent exciting cause. The course of the disease was similar in the two, but more violent and more quickly fatal in the younger brother.

It seems to us, then, that so far as the experience recorded in the *'Archives Cliniques'* can be quoted, it affords no support to M. Baillarger's notion of the association of a particular variety of hypochondriacal delirium with general paralysis, as a precursory symptom available in diagnosis. We might add, moreover, that of several other cases of paralysis recorded, an antecedent or an intercurrent melancholia or hypochondriasis is mentioned in none, and, on the other hand, that several instances of hypochondriasis are noted without

any coexisting or subsequent paralysis; and, as Dr. Casimir Pinel remarks, most practitioners can adduce examples of hypochondriacs, having precisely that particular class of delusions respecting themselves, to which M. Baillarger would attribute a special significance, in whom no paralysis was ever manifested. .

The Water Cure in the treatment of Insanity.

The employment of water, in the form of baths and douches, has always been much more extensively resorted to on the Continent than in this country. The use of prolonged baths, though sanctioned and advocated everywhere else in Europe, has never been adopted in this country, though doubtless valuable and active as a means of treatment. Douche baths are very much more frequently resorted to by foreign physicians, and their place largely supplied among ourselves by the shower bath, and, at the present time, Dr. Lockhart Robertson is most vigorously at work in testing and recommending from experience, the use of the Roman, or as they are better known, the Turkish baths. And doubtless much more may be done with baths and other modes of applying hot and cold water to the body than most of us are disposed to believe. Every year hypochondriacal, morbidly affected, and half-crazy men and women, find their way in multitudes to water-cure and bathing establishments at home and abroad, and, as every one's experience can testify, are for the most part improved, if not cured, by their excursion, dippings, and washings. And we find that some of the asylum physicians of France have thought so favorably of the water cure, as to try it with some of their patients. Four instances of its employment are reported in the 'Archives Cliniques' for 1861.

The first one, at Charenton, was that of an officer, who entered the army at nineteen; was drafted immediately to Africa (in 1832), and there exposed to all the dangers of the field, and the excitement of a soldier's life. In 1844, he had symptoms of tapeworm, and did not get rid of it until 1851; he was afterwards run over by a carriage, had a slight attack of cholera, and after that a sun stroke, and in 1856 began to exhibit symptoms, which eventuated in general paralysis, of which he died in 1858. It was not until the beginning of 1858 that the water treatment was commenced, and when paralytic dementia was far advanced; and it is, therefore, not surprising that this means should fail to benefit. This case, therefore, cannot be cited for or against the advantages of the water cure, for it was one beyond the power of remedies of any sort.

The second case was one of recovery, and occurred at the Asylum of Quatre-Mares, under M. Dumesnil. It was that of a young man, eighteen years old, a victim to masturbation, and predisposed by maternal descent to insanity. He fell into a state of melancholia with stupor (*melancholia attonita*), and was admitted into the asylum

in March, 1860. He rather got worse than better, and fell into almost a typhoid state, when, on June 15th, he was tightly enveloped in a wet sheet, and over it three or four blankets. Reaction ensued in an hour and a half, and he was replaced in bed. On the 17th a seton was inserted in the neck, and the wet sheet repeated daily, an improvement manifesting itself after its application, but it was not until the 24th of the month that this was maintained; after which date it became progressive. With the hope of accelerating recovery, electricity was tried on the 12th of July, but as it seemed to do no good, this was omitted on the 24th. And on the 1st of August the seton, which had almost ceased to discharge, was withdrawn. The wet sheet seemed to promote his recovery, and was continued until the 11th of October. A month afterwards he returned home quite well.

Another case is referred to by the same reporter, where the mental and physical symptoms were the same, and where also the same mode of treatment was employed with equal success. This patient, after his recovery, stated that he was sensible of amendment after the use of the wet sheet was begun, and the seton introduced in his neck. The measures previously employed, electricity, baths, coffee, and stimulants of all sorts, were of no efficacy at all.

The third instance of the employment of so-called "hydropathy," was in an unmarried woman, aged forty, whose habits had changed, and who had become morose, indifferent, and torpid, averse to movement and occupation of all sort. On her admission into the asylum at Maréville, she appeared to suffer with melancholia with stupor, and notwithstanding the treatment adopted, the stupor advanced until she became completely cataleptic, and might be placed in any attitude without resistance and without change. Stimulants and antispasmodics, particularly ether, purgatives, derivatives, and affusions, and afterwards tonics and stimulants together, were employed without advantage. At length the water treatment and electricity were tried, and very soon effected an improvement, and ultimately a cure. The wet sheet was used, and besides this friction with snow. M. Auzony attributes the recovery equally to the hydro-therapeutic treatment and to the electricity.

The fourth case was also one of melancholia with stupor, and occurred under M. Auzony's care, at Maréville. It was that of a young man, aged twenty-six, admitted in the spring of 1859, in a state of most complete moral and physical torpor, yielding automatically in his movements to others, and quite taciturn. Stimulants were at first resorted to, of every sort; then affusions, the douche, blistering the head, purgatives, and urtication. Moreover, a trial was several times made of etherization, carried only so far as the stimulating stage, but without durable effect. Electricity was now tried, and with so much success that he began to take some gymnastic exercise in the gymnasium attached to the asylum. In the autumn

he was sensibly improved, and then vapour baths were superadded, and seemed to afford relief by the free transpiration induced. This suggested the employment of the water cure, which was carried out by vigorous rubbing with snow, followed by wrapping in the wet sheet, and enveloping him then in blankets. The abundant sweating produced by this means had a most favorable effect, and the patient became much more sensible to the electricity (faradization). In February, 1860, gymnastics and faradization were alone continued to hasten the patient's convalescence, which had distinctly set in since the adoption of the cold water cure.

Insanity by imitation.

A remarkable case of insanity by imitation or simulated insanity, in two sisters, is recorded by M. Combes, from the Asylum of St. Gemmes. They were two country girls, and admitted at the same time after all the legal formalities of medical certificate, procès-verbal, or inquest before a magistrate, and order of admission, had been complied with. The elder sister was thirty-eight years old and unmarried, and had been disappointed of marriage. The disease showed itself by eroto-mania, then by destructiveness and wandering, but though she often was threatening in manner and language she did no harm to any one. She dragged about with her, her younger sister, who appeared as crazy as herself, and partook in all her irregularities. On admission, the two sisters were separated, but the elder made no inquiries after the younger. She was treated principally by prolonged baths, and after a time recovered. The younger sister was also single, and thirty-five years old. The only abnormal condition discoverable was a certain degree of mental weakness, although to establish her insanity it was affirmed that, instead of being an industrious woman as previously, she had suddenly laid aside all labour without appreciable motive, had not opposed the destruction of their furniture by her sister, and had followed her sister in her vagabondage and irregular life. She was also accused of having similar delusions as her sister with regard to impossible marriage schemes, and of lewdness, and was stated to have said that, "as for me, I have no need of so many husbands, I shall be quite content with my sister's." Lastly, there was no question that when at length taken in charge, she was as completely naked as her sister.

When questioned relative to these circumstances, and her previous life, she answered quite rationally; but remarked that she was not strong in the head, that she loved her sister so much that she voluntarily associated herself with her in all her caprices, although conscious of their insanity, and chose to imitate her and to be accounted a lunatic. The circumstance of being found naked she explained was that she and her sister being imprisoned in a room at

the Mairie, all their clothes were removed to prevent an attempt to escape, but that they did escape from a window nevertheless; an explanation which was confirmed. She acknowledged she was much to blame, and, unlike her sister, when first seen exhibited no signs of sexual excitement and libidinous expression, but a sense of shame when interrogated respecting her joining her sister in her irregular and immoral conduct. During her stay in the asylum she showed no signs of mental disturbance, conducted herself with propriety, and always manifested the greatest interest in her sister's health and progress.

At page 29 of the 'Archives Cliniques,' M. Dagron, of the Asylum of Napoleon-Vendée, reports another interesting case of two sisters affected with similar monomaniacal delusions, and placed in confinement at the same time. The unmarried elder sister, thirty-eight years of age, played the most prominent part and her history only is detailed. Her sister had been married, and was thirty-six years old. Both lived with an aged father, and for some years were the source of great trouble to him on account of their eccentricities; these at length became unbearable and dangerous. The elder unmarried sister was under the delusion that she had been violated during sleep, and insensibility induced by a noxious drug, and that her father was privy to it. After seeking interviews with her supposed seducer, and being disappointed, she manifested a desire to revenge herself on him, and at one time sought to decoy him into a house, where she and her sister were prepared, armed with pistols, to murder him. Moreover, she never walked out without arms, and used the greatest precaution to safely lock herself in when at home, to save, as she said, herself and her sister from those who had designs upon their virtue. A brother she accused of exercising the art of magic and of allowing her no repose. At length M. Dagron was called upon to arrange for the removal of these two afflicted ladies to the asylum, and he naively relates the difficulties and danger he had to encounter in effecting this object, and of the subsequent annoyances he had to undergo at their hands, when by his skill their mental state had been improved.

In this last-quoted case there was no question as to the insanity of both sisters; the principal point to be noted is the concurrence of the two in the same delusions, a circumstance of only occasional occurrence among the insane and therefore deserving to be recorded. The simultaneous occurrence of similar aberration and eventual general paralysis in two brothers, has already been noted above.

Recovery as a sequel to incidental disease.

It is a well recognised fact that insanity, even when of an unfavorable type, is every now and then seen to disappear, or to be greatly ameliorated, after the attack of some grave bodily disorder.

We have ourselves witnessed this occurrence after smallpox, erysipelas, and pneumonia. In the first volume of the 'Archives Cliniques,' several examples are recorded. For instance, in a man, aged forty-four, admitted into the Blois Asylum with ambitious delirium, muscular tremor, and stuttering, hesitating speech, or, in short, with the symptoms of general paralysis, recovery which lasted four years appeared to supervene upon an abundant suppuration from sloughs on the two elbows. A second instance occurred at the same asylum, where a man, thirty-one years old, was seized with suicidal melancholia, and severely bruised and cut his scalp by beating his head against the wall. From these injuries a large formation of pus resulted, and incisions were required involving some loss of blood, which with the suppuration reduced him to a state of excessive feebleness, with symptomatic fever. On the occurrence of free suppuration an improvement at once showed itself, and in eleven weeks from the date of his admission, the patient went out well.

M. Dumesnil reports a case of melancholia cured after an attack of scarlatina intentionally contracted. The patient, a farmer, was seized with suicidal melancholia, when thirty-eight years of age, and was transferred to Charenton, where his case was viewed unfavorably on account of a strong hereditary predisposition to it. After seven months' treatment no marked improvement was effected, and he then came under M. Dumesnil's notice. After a time he somewhat improved, but then again relapsed, and was transferred to the infirmary just at a time when two cases of scarlatina had made their appearance. After three or four days' residence in the infirmary the idea occurred to M. Dumesnil that possibly an attack of scarlatina might bring on a crisis in the patient's malady, and as the disease was mild and uncomplicated, he, with the sanction of his colleague, determined to let him remain exposed to the contagion of the fever. The patient took the fever, and even before the characteristic eruption was well out, he announced to his physician that his morbid depressing ideas has left him as if by enchantment, and from this time his mental state underwent an entire change; he passed through the fever without untoward event, and in six weeks from his febrile attack returned home well, and has continued so for the three years which have since transpired.

Dysentery proved critical in two cases. The first was that of a married man, aged forty-two, who became suddenly maniacal upon hearing of the loss of 3000 francs, and was excessively violent, destructive, and incoherent. Two days after the outbreak he was admitted into the Asylum of Rodez, and on the following day was seized with dysentery, which was then prevailing in the institution. During the course of this malady the delirium and agitation gradually decreased; he seemed to insensibly awake from a state of dreaming, and by the first of September was cured of the dysentery and restored to reason. It should be mentioned that besides the dysentery the patient suffered

from various cuts and bruises about his body, and especially with a deep gash, self inflicted, across the back of the neck. M. Renault du Motey, who reports the case, attributes the recovery in some degree to this large suppurating wound, as well as to the dysentery.

The second instance in which an attack of dysentery appeared to be curative, was that of a lady admitted into Maréville Asylum February 4th, 1861, aged forty-nine. She was predisposed to insanity, her mother having been insane, and her mind gave way on the occasion of a judicial search being made in her house respecting some stolen property. She fell into a state of melancholia, with aversion to her husband and partial stupor was superadded, to this disorder some short time after her admission into the asylum, followed by refusal of food, and much excitement and destructiveness, against which the camisole was employed. In May her condition had become worse, and a seton in the neck, previously applied, was removed. In the middle of June she got an attack of dysentery with frequent vomiting, but this was relieved in about ten days, and a marked improvement occurred in her whole condition. She became quieter, slept well, took food readily, and requested employment. Contemporaneously with all this it was observed that she had profuse sweats regularly every morning; these however, produced no exhaustion. On the 8th of July she was alarmed at the escape of an epileptic female in a state of nudity, and the reaction of this on her mind completed its restoration to health. The morning sweats continued, and it was now discovered that the catamenia had left her six months before her admission into the asylum and two months only before the outbreak of her insanity, and that she had suffered on their disappearance from fulness of head, faintness and vertigo. On the 28th of August she was discharged cured.

Dysentery, followed by acute rheumatism, was apparently the cause of recovery in a woman, attacked with monomania in her thirty-eighth year, and after four years' persistence of the disorder. There was no appreciable cause of the attack, which commenced with sadness, and the delusion of persecutions and conspiracies. After cherishing her project for some time, she murdered one child and would have killed a second if not prevented, by dashing out their brains against the ground; her desire being that she should be executed for the murder. Being acquitted on the ground of insanity she was transferred to the Asylum of Napoleon Vendée, and there about a week after admission, almost succeeded in committing suicide by cutting her throat. If not perpetually watched she attempted self injury in every conceivable manner, and was a cause of the greatest anxiety in the asylum. Prolonged baths, hot and cold, according to the season, continued irrigations on the head, douches, opiates, derivatives, &c., &c., were successively employed during more than three

years, without benefit, when in October, 1858, she was seized with dysentery, then prevailing in the asylum. After some days' refusal of the means of treatment prescribed, she at last willingly submitted to them, and from this time convalescence set in, but was interrupted by an attack of rheumatism, which was got the better of in October, 1859, when she appeared quite recovered in mind, though still detained in the asylum.

Another case is recorded by M. Berthier, from the Asylum of Bourg, where recovery ensued three years after an attack of religious monomania, with melancholy and stupor, in a woman thirty-nine years of age. About three years after admission she eluded her nurse and precipitated herself from a window, causing, among other injuries, a comminuted fracture of the elbow. No improvement in her mental state followed, whilst her bodily condition became deteriorated by hæmoptysis, intense fever, and then signs of purulent absorption and an apparently dying state. However, she revived, took nourishment, and although an attack of dysentery supervened in the following year, and ended in chronic diarrhœa, she slowly acquired strength. After a time the diarrhœa ceased, and an evident mental improvement occurred; her sleep returned, she took food well, and employed herself. Her delusions of being lost, and of unpardonable wickedness, were elicited only by interrogation; she desired to see her husband, and in a short time more her mind appeared recovered and she returned to her home. Nine months afterwards she remained quite well. In this case the attempt at suicide happened in March, 1858, but it was not until the autumn of 1859 that improvement showed itself, when the vigour of the body had been all but annihilated.

Profuse intestinal hæmorrhage ushered in recovery in a case of painful hallucination of vision consequent upon an injury from a railway accident. The report is by M. Baillarger. The patient was fifty-two years old, and met with an accident on the railway near Nancy, which rendered her insensible at the time and delirious for several days afterwards. She was twice bled after the accident, and when consciousness returned was haunted at short intervals by the appearance of a train about to crush her, and the hallucination induced general tremor, with a sensation of fright, lasting several minutes. She sought to go to Paris, but would not again venture on the railway and determined to walk there. However, her strength was unequal to the task, another attack of delirium seized her, and she was found wandering in a wood and exhausted. She was brought on to Paris, and was then found a prey to the same hallucination, followed by universal trembling and a sort of convulsive motion. Apart from this, her reason seemed to be sound, and she was able to go on with her employment in the market. Nevertheless her hallucination exposed her to great dangers, for she was prompted by it to throw

herself before carriages and many times scarcely escaped being crushed to death. Very soon delirium was again superadded, and then she became haunted by other painful hallucinations, as of reptiles and all sorts of animals tormenting her, and of objects being overturned, cut in two, or enormously enlarged. The mental disorder became general, she tore her clothes, and acted so wildly that she was taken to the Salpêtrière. Here on admission her attention could for a time be fixed, but when left to herself she was incoherent. Under improved regimen, repose and quinine, a speedy amelioration of her condition ensued, excepting in respect to her hallucinations. She continued the same until October 29th, when a copious hæmorrhage from the bowels took place, with immediate mitigation of her hallucinations. A few days later, however, these recurred as vividly as ever, when, on the 19th of November, they were replaced by a vision of a collision and a conflagration, followed by strong emotion, vomiting, and a cutaneous eruption. On the next day, there was pain in the liver, which was evidently enlarged, and a jaundiced hue of the skin and conjunctiva. Twenty leeches were applied over the liver, and soon after a second attack of intestinal hæmorrhage came on. From this moment the hallucinations decreased in frequency and vividness, and after five or six days' repose in bed, they disappeared altogether.

Derivative Treatment by Blistering in Melancholia.

The above-quoted cases of incidental disease and injury followed by recovery are examples of what is hypothetically called derivative action; the one following is another instance of the same action, obtained purposely, and attended by an equally favorable result. The patient, aged thirty-six, unmarried, a governess, was under the care of M. Petit, at the Nantes Asylum. After living fifteen years governess in a family, her services were no longer required, and although a home was still offered to her in the family, she declined it, and went to live with some friends. In a very short time her manner began to change; she became dull, susceptible, and scrupulous, and at length entertained fears for her personal safety, and brusquely quitted the house to go to her brother's. Here the same sombre disposition was manifested; her scruples went on multiplying, and her mind, preoccupied with the delusion that she was lost for ever, was the cause of all the evils which had befallen her family, and that she ought to die. Her next act was to endeavour to poison herself with laudanum, after which she was removed to the asylum. Baths were ordered, and other treatment resorted to, but her condition grew worse; she required constant watching, as she sought to destroy herself; she refused food, and had to be fed at

length with the œsophageal tube. Baths, douches, and affusions with hot and cold water failed to benefit her, and the coldness of the season rendered their employment less expedient. Recourse was then had to the derivative treatment, not, as M. Petit remarks, from a belief in its influence on the cerebral disease, but as a means of fixing the attention of the patient, who necessarily desires to be released from a painful or uncomfortable mode of treatment. It was accordingly impressed upon her that, as her brain was diseased, a rigorous but also a very efficacious means of removing irritation must be adopted. A blister, about four inches in diameter, was accordingly applied to the calf of one leg, and she was told that if this did not serve the purpose another would be placed on the other leg on the following day; she complained much of her blister, which pained her, and prevented her walking. However, as she did not yield in any way, a second blister was ordered. The next day she made loud complaints, sat quietly on account of the pain, and took some food without the œsophageal tube, and she was told her blisters should be diminished in size if she did well. On the subsequent day she was better, and only one blister was continued; this in another week was omitted, the improvement having steadily advanced, and in another month she was discharged cured. Five years afterwards, at the date of the report to the Journal, she continued well.

On the Sequestration of the Insane.

Dr. Casimir Pinel has published in the ‘*Journal de Médecine Mentale*,’ a series of papers on the “Sequestration of the Insane,” and on the modes in which it may be most advantageously effected in respect to the different classes of such sufferers. He reviews and discusses the advantages and disadvantages of home treatment, of surveillance in private houses, of confinement in asylums, public and private, and of travel. He commences by showing that mental differ so materially from other disorders, that treatment at home under the usual conditions is almost always impracticable and mischievous. Even treatment apart by isolation of the patient in his own house, where this is practicable, is rarely desirable. Still this rule has exceptions, and, by way of trial, home treatment is permissible when the attack is recent, and presents no grave features; as when there is only slight maniacal excitement, monomania or melancholia, or certain hallucinations and delirious conceptions not relating to the family, or a state of hypochondriasis, or of dementia devoid of agitation. If, under such circumstances the attention of relatives is duly appreciated, thankfully received, and ardently desired, then the removal of the patient is not only not necessary, but also cruel; for naturally none can and will do so much for his comfort and well being as his

relatives. Where entire restriction to his own apartment is required, some trustworthy attendants, strangers to the patient are needed, and the visits of friends and of persons of the opposite sex interdicted. The exclusion of the wife or of the husband, as the case may be, is often absolutely necessary, to avoid sexual excitement; and under the most favorable circumstances, numberless inconveniences and annoyances will attend the detention of a patient in his own house. These are well pointed out by M. Pinel, but neither they nor the circumstances which should induce the abandonment of the attempt at home treatment, need be repeated in these pages.

The next plan of treatment considered is that in private houses, where the necessary means are provided. It is more available than home treatment for the insane, but from its cost, is necessarily so only for the richer classes. The house should be in the country, and be detached and surrounded by a good garden or pleasure-ground. It should not be the property of the patient; it should be secure, and provided with all appliances for treatment, such as baths; constant surveillance by trustworthy attendants should be provided; if possible a medical man should reside with the patient; but if not so, a neighbouring practitioner should daily, or at least frequently, visit him. Another essential condition is, that none of his family should reside in the same house, unless under some exceptional circumstances by permission of the physician in attendance, to whom the whole direction and control must be confided. Provided these conditions be complied with, this plan may, under certain circumstances, be (says M. Pinel) equally advantageous with those supplied by an asylum. In fact, such a house is a small asylum, but exempt from those impressions attaching to an asylum, and excluding all fear of contact or of the moral influence of other lunatics; matters, by the way, concerning which the public makes a great outcry, though really rather favorable than otherwise to most insane patients.

A private house organized to meet all the legitimate requirements of the case, at whatever expense, yet involves the patient in complete isolation, and deprives him of the influence of a multitude of conditions, which together concur to render the moral and physical regime more perfect, and more successful in practice. And moreover, a thousand incidents are perpetually occurring of an irritating and wearying character for the medical attendant, and perpetual annoyances from attendants and from the relatives of the patient, with whom there is almost always a division of opinion relative to the mode of treatment adopted. These drawbacks to the plan of sequestration in a private house are graphically and truthfully detailed by the writer.

When patients have been unsuccessfully treated, and have become calm and inoffensive, or are demented and paralytic, and therefore

require only general attention to hygiene, their care in a private house is available; and except where hereditary predisposition exists, separation from their family at large is not required. Nevertheless, it is prudent not to subject children, especially young girls, to the moral contagion of intercourse with their afflicted relative. On the other hand, this sort of provision cannot be entertained where there is violent mania, melancholia, suicidal tendencies, epilepsy, or homicidal or instinctive monomania; for with the best intentions, the measures necessary for the safety and treatment of such cases cannot be resorted to without detriment to the patient. Other disadvantages are pointed out, and M. Pinel concludes that treatment in a private house is only exceptionally preferable, but that the majority, including necessarily all those of moderate means and the poor, are best cared for in asylums. He discusses at large the objections made against asylums, shows how worthless they are in almost every point, how largely asylum treatment has improved, and to what perfection it is brought, and what care has been taken by the State to guard against improper detention and improper treatment. He examines the relative advantages of private and of public asylums for those classes of patients competent to pay for their maintenance, and decides on the superiority of private establishments, defending them and their proprietors from popular calumnies so frequently current with the public. He inquires, lastly, why asylums do not effect more good, and by way of conclusion remarks, that "in the interest of the insane, of families and of society, both from a medical and a philanthropic point of view, a more prompt resort to treatment than is usually the case should be insisted on; that delay in the sequestration of lunatics is a cause of incurability in a multitude of instances, and an occasion of accidents, and that it is right that the law should insist in some cases on the confinement of insane persons in asylums."

The utility of travel to insane patients is well discussed by M. Pinel, who whilst recognising the many difficulties which surround the plan, and its mistaken adoption in many cases, agrees with Esquirol and others on the great benefits which ensue from it in properly selected cases. The circumstances which are favorable to the trial of travelling as a means of treatment in insane cases, are thus set forth:—
"In threatened but not developed delirium, the result of excessive intellectual work, of abuses of any sort, of violent griefs, of disappointed love, or of any other vehement passion or emotion. In such the removal from the scene of excitement or toil, and the brusque interruption of fatal habits by travel may turn aside the threatening attack. 2. In melancholia, without incoherence of ideas. 3. In the lucid intervals of certain intermittent mental disorders, to prevent the recurrence of the paroxysm. 4. During convalescence, to confirm the recovery, and especially to avoid the too speedy resumption of

labour, or return home. 5. Lastly, in intellectual derangements of an inoffensive character, and which have resisted the course of treatment in an asylum for a long time.”

Epithelial Granulations of the Arachnoid.

Dr. Ludwig Meyer has presented a complete history of these granulations in Virchow's 'Archiv,' Band xvii. These granulations, noticed on the arachnoid in the brains of many insane, occur in large numbers, are small, and look, when viewed obliquely under a direct light, like so many opaque elevations. When seen by a magnifying glass, many of these granulations are found to be connected together by flat processes, whilst in other places they appear to form various intersecting lines. They are, as a rule, found on the convex surface of the cerebral hemispheres, but occasionally occur at their base, and also on the cerebellum. The arachnoid, when so affected, is always opaque, and thickened at parts, and frequently the well-known granulations of the spondyma of the lateral ventricles are also met with in connection with the meningeal granulations of the cerebral surface. No such growths were met with on the arachnoid in individuals who had died from typhus and tuberculosis. A microscopical examination showed that these granulations are composed of large, dark-outlined, opaque, or granular cells, which burst on the application of acetic acid, and allow their granular contents to escape. No actual connection can be found between them and the connective tissue of the arachnoid itself. Their granules are disposed concentrically, or in longitudinal lines, or at times in heaps, and their form does not admit of their being confounded with the granules of the connective tissue. Meyer's conclusion, therefore, is that these granulations originate from a sort of hypertrophy of the epithelium of the arachnoid.

In many specimens the cells were found to be undergoing metamorphosis, and presented in their interior collections of fat-cells or of calcareous matter in the form of granules, or more frequently, of concentric spherules. The last-named were noticed as first appearing at the apex of the granulation. Meyer, moreover, found in the normal condition of the arachnoid a collection of small, uniformly rounded cells, under its epithelial layer, which he looked upon as the analogue of the *rete Malpighii*.

The granulations of the arachnoid are met with in cases where delirium tremens, chronic epilepsy, or progressive general paralysis have existed, and have brought about also other considerable changes in the brain and its membranes. Similar granulations were, moreover, observed in the epithelial layer of the dura mater.

Case of the presence of Cysticercus cellulosus in the Brain.

This case is reported by Dr. Snell, of Hildesheim ('*Zeitschrift für Psychiatrie*,' Band xviii, p. 66, 1861). It occurred in a young man, aged twenty-four, a linen-weaver, who also in the winter was partially occupied in slaughtering pigs. In April, 1857, he had an attack of intermittent fever, with great congestion about the head and chest. Strong doses of quinine removed the paroxysms for a time, but at intervals, longer or shorter, they recurred, and he did not completely recover his health. In the summer of 1857, the patient suffered from frequent and periodic severe pains of the head, especially of the occiput, with weakness of vision, dilatation of the pupils, noises in the ears, vomiting, anxiety, a feeling of weakness, and of loss of power in the extremities. The mental state was also very often confused; and sometimes the patient had to keep his bed, at others, engaged in some light work. About the end of September he was suddenly seized with a maniacal attack, and had to be restrained from violence. He had hallucinations of balls of fire falling around him, which he endeavoured to catch and to extinguish. He next thought himself pursued by monstrous forms, which endeavoured to seize upon and chain him in fetters, scattered around in every direction. More cheerful hallucinations were exchanged for those terrible ones; he imagined himself in company, and travelling sportively over hill and dale. After this state of excitement had lasted three days and nights without any sleep, he fell into a deep sleep for twenty-four hours, and then awoke quite conscious, having, however, no distinct remembrance of the excitement and mental disturbance he had passed through. He now again suffered from headache, with a feeling of a ring tightened round the head, noises in the ear, indistinct vision, and more or less paralysis of the voluntary muscles. The excitement recurred during the next two months several times, passing through the same course as before. In November and December the mental disturbance became more continuous, and the paralysis, with mental stupor, augmented. Appetite and nutrition, however, remained normal.

At the end of December he was taken to the asylum. His gait was then faltering; the pupils unvarying and dilated, and the left one rather larger than the right, and he was getting blind fast. Pulse 96. Severe frontal headache complained of. Anæsthesia of the skin was not discoverable. He could comprehend and answer questions directly addressed to him only when they related to objects and circumstances immediately under his notice. All the bodily functions of nutrition and circulation appeared healthy. He slept well on the first night, and appeared rather better next day; but at night the paralysis became so much worse that he could neither stand nor

move his arms. After a tranquil night he was better on the 29th. He walked across the room, moved his arms quite freely, and gave intelligent answers; at the same time the rigidity of the pupils and blindness persisted. Towards evening the paralysis increased, and at 10 o'clock was very restless. He got out of bed and groped for the walls of the room, telling the attendants he must get away out of the churchyard. After three hours this excitement passed away and coma followed, which ended in death three hours afterwards.

Autopsy.—Body well nourished. Brain weighed fifty-four ounces. Throughout the brain numerous cysts were discovered, which proved, under the microscope, those of *cysticercus cellulosus*. Five of these cysticerci were affixed by pedicles to the inner surface of the dura mater; all the rest occurred in the gray matter alone, and in this wherever it existed, whether on the surface of the convolutions, or in the ganglions, or in the commissures. By far the largest number existed in the gray lamina of the hemispheres, and here and there were collected in dense groups. The gray substance of the optic thalami, and corpora striata, was closely beset with them. In the cerebellum only four were met with, whilst in the medulla oblongata they were entirely absent. They were not seen anywhere within the white substance, although at some points where very numerous in the gray lamina they had penetrated it.

The entire number of cysticerci encountered was 200. They were for the most part fully developed, and contained watery fluid; however, there were some in process of degeneration, containing opaque, yellowish, or purulent matter. In size they were mostly about that of a small pea, but some were not larger than millet seed, whilst the largest did not exceed the dimensions of a full-grown pea. The brain was otherwise firm, and quite normal in appearance; nothing like inflammatory action showed itself in the neighbourhood of the cyst, or, indeed, any other change. The arachnoid and pia mater were normal.

Excepting in the brain, no cysticerci were discoverable in any part or tissue of the body elsewhere, and no pathological change of any sort; wherefore all the morbid symptoms and the cause of death can be attributed to nothing else than the presence and pressure of these parasites in the brain substance. It is well to observe the entire absence of spasm in the history of this case; and another very remarkable circumstance were the variations, not only in the psychical symptoms, but also in the degree of paralysis; the fluctuation in the latter condition being most distinct in the last stages of the disease. The cysticerci presented, when detached, placed in lukewarm water, much more active movements than they generally have credit for, particularly in their capacity of contraction. Could such movements stand in any immediate relation with the fluctuations in the symptoms? Stich inclines to this opinion. In his meritorious

essay on cysticercus (in the 'Annalen des Charité-krankenhaus,' Berlin, 1854), he has collected the history of fourteen cases of this parasitic growth in the brains of man. Some of the descriptions he makes use of, from various writers, are in parts very defective; but he deduces the usual indications of the presence of cysticerci to be mental disorder, convulsions, and paralysis. In four cases, epileptic convulsions were noted. Twice intermittence in the symptoms was noticed, as in the preceding case, which began as intermittent fever. In some few cases, where the number of cysticerci was small, no morbid results were connected with their presence.

The Temperature of the External Surface of the Head in the Insane.
By Professor J. F. H. ALBERS.

Professor Albers, taking as his starting point the thermometrical observations of John Hunter on the comparative temperature of the body in health and disease, and the admitted elevation of the temperature of the external surface in some fevers, in pneumonia, and other diseases, proceeded with a series of original researches on the temperature of the head among the insane, the internal disordered action of the brain being in some cases, at least, referrible to altered circulation, to congestion, if not to inflammatory action. Admitting an abnormal circulation to prevail within the cranial cavity, he argues from analogy with other inclosed organs, that this disturbance must be manifested externally on the surface of the investing structure.

But before he could carry out his plan with reference to the temperature of the head in insanity, it was necessary to know what might be the usual temperature of that region in healthy people; a piece of information he could nowhere discover in books. Accordingly he was compelled to commence *ab initio*, and to collect data with respect to the sane to serve as a standard of reference for his enquiries relative to the insane. In order to secure as much correctness as possible with such data, it was necessary in exploring the temperature of the head and other regions to discover the differences, if any, dependent on age, sex, the surrounding temperature, the variations of warmth attendant upon clothing, the time of day, the state of health and constitution, the state of repletion or of fasting, the quality of the food, or the medicinal agents taken, &c. On these particulars he does not go into detail, and the leading results narrated are as follows: Of all the external parts of the body the highest temperature is met with in the axilla and in the triangular space on the front of the neck inclosed between the two sterno-mastoid muscles. In this region the temperature was 29° R., more rarely $28\frac{1}{2}$ or 28° . Taking the parts of the head, the heat in the temporal region varied from 24° to 25° R., and behind the

ear from 27° to 28° . These are the usual ranges of temperature in adults of from twenty-two to thirty-five years of age, and calculated from between 300 and 400 observations. As general facts it may be stated that the degree of warmth immediately over muscles exceeds that in spaces adjoining them, and, what is remarkable, that the right is appreciably warmer than the left side of the body. This latter holds as an almost universal rule, the exceptions being so few. These facts hold good of the human subject both in health and in disease.

Professor Albers, after establishing these general data, proceeds to give a daily record of observations made in a case of religious melancholy attended with great restlessness. The patient was twenty-four years of age, and had been ill five months. The irritation was accompanied with plethora and with hæmorrhoids. The temperature of the room was kept at the time of observation, which was between half-past nine and half-past ten in the morning, an hour and a half after breakfast, at a uniform temperature of 15° R.; and the patient out of bed and dressed. The thermometer was applied to the temples, behind the ear, on the fore part of the neck, and to the hands. The figures representing the temperature of each of these regions are daily recorded, together with the mental condition of the patient, the amount of sleep he took, and the medicine administered; these particulars we cannot here reproduce, and it must suffice to notice Professor Albers' conclusions from them.

The heat of the temporal region is normally 24° or 25° , but in the young man in question it was rather higher, viz., 26° . In a young officer of sound mind, in the temporal region the thermometer stood on the left side at 26° R., and on the right at 27° ; the mastoid region showed 27° on the left, and 28° on the right side; while the temperature of the neck reached 29° . The heat of the temporal region is less than that of the mastoid, and still less than that of the front of the neck; the variation equalling two degrees between each region.

Other series of observations were carried on in two cases of chronic dementia, and in one case of hysterical insanity, and the same general results were arrived at, together with the following: that maniacal excitement in any form or degree is accompanied by an elevation of temperature in the frontal region, and in a lesser degree in the temples, and under and behind the ears. The fact that the sufferers from dementia present as high a temperature of the head as the non-demented insane is one of much interest, particularly as from the less active and complete nutrition of the brain in the former it has been generally supposed that there must be a diminution of cutaneous warmth. The increase of temperature consequent on mental excitement, if dependent on an augmented supply of blood, implies that such excitement is attended by an increased

determination of blood to the head. 2. That the increase of temperature is greatest in the temporal region. For the differential amount of heat, about two degrees, between that and the mastoid region, is decreased when any amount of excitement occurs, a circumstance equivalent to a positive rise in the cranial temperature. 3. The figures denoting the heat of the head and of the neck respectively, are, 24 or 25 in the former, and $28\frac{1}{2}$ or 29 in the latter. But if there be an accession of heat in the temporal mastoid region, the augmentation in the neck is not proportionately great, the temperature rarely exceeding 29° . The normal difference, therefore, between the head and neck is diminished, and the more so as the frontal heat is greater; and the conclusion may be drawn that the temperature of the head is abnormal when there is a difference between it and that of the neck of less than three degrees. 4. With reference to the difference of temperature between the two sides of the head, of from $\frac{1}{2}$ to $1\frac{1}{2}$ under slight emotion, this becomes inappreciable under strong excitement.

Two other sets of facts occurred to Professor Albers from these researches on animal heat; one bearing upon the rapidity with which an elevation of temperature is accomplished, and the other on the inequality in the radiation or diffusion of the warmth. On measuring the heat of the head in sudden paroxysms of passion, when the countenance, the head and neck had momentarily reddened, he found the temperature rise from one to two degrees. Such results are best and most witnessed in the sudden outbursts of rage in the insane, and, though in a less pronounced manner, in that passing irritability attended with redness and heat of face, noticed in women at about their climacteric period. And it is instructive to notice both that insanity is liable then to occur, and that when it does happen, it follows the psychical type of that period, when the mind is imbued with distrust, is irritable, morose and enfeebled, and disposed to despondency.

The other phenomenon noticed was the unequal length of time which transpired before the thermometer marked its highest point. On some days, under precisely the same conditions of surrounding media, of the time of day and of thermometrical reading, the maximum heat of the part was not indicated until after the lapse of three or four minutes, whilst on others this was accomplished in a minute or a minute and a half. This circumstance is explicable only on the supposition of an unequal rate of radiation of heat from the body on some days than on others, for the moisture or softness of the skin did not exhibit any modifying effects in this phenomenon. It moreover appears from the many measurements made upon patients, that the radiation of heat from the body varies at different parts of the day, and under various conditions of health. Whilst putting forth these facts as well worth attention, Professor Albers

confesses that similar observations need be repeated, and the variations caused by food, sleep, motion, external temperature, barometrical pressure, the evacuation of the bladder and rectum, and other conceivable disturbing causes, allowed for and duly appreciated.

As to the effects of different diseases, as far as observed, no difference obtains in melancholia and in dementia; except when there was much torpor, when the rise of the mercury took place more slowly. This fact suggests the question as to the difference of radiation of paralysed and of non-paralysed parts. The variation in radiation at different parts of the day, and on different days, suggests this inference—that the need of clothing and of warmth must likewise vary even where external atmospheric conditions are unchanged as to temperature. Indeed, it is a well recognised fact, that we may feel warmer on one day, when the temperature is even lower, than on another in which the heat has been greater.

Sixteenth Report of the Commissioners in Lunacy to the Lord Chancellor. 1862, pp. 225.

Fourth Annual Report of the General Board of Commissioners in Lunacy for Scotland. 1862, pp. 248.

Eleventh Report on the District, Criminal, and Private Lunatic Asylums in Ireland, with Appendices. 1862, pp. 60.

RESERVING for another occasion an analysis of the general contents of the official Reports which head this article, we shall at present restrict ourselves to a sketch of the comparative statistics of lunacy in the three divisions of this kingdom.

According to the returns of the English Commissioners in Lunacy, there were 24,845 lunatics in asylums, hospitals, and licensed houses on January 1st, 1861, and 26,200 on January 1st, 1862, showing an increase of 1355 in the course of the year. Of this increase 128 occurred among private, and 1227 among pauper lunatics.

The Scotch Commissioners' returns are upwards of a year old, and unlike those of the English Board present the statistics of 1860. However, on the 1st of January, 1861, there were in public and district asylums, and in private asylums and licensed houses together, 2619 lunatics, being an increase of 80 in public, and of 55 in private institutions, and together of 135 in the course of the year 1860.

The Irish Report, again, comprises the history of lunacy in Ireland for only nine months; viz., from the 31st of March to the 31st of December, 1861, and thus increases the difficulty of a survey of the state of lunacy in the entire realm. Keeping in view only those insane who are inmates of public or private asylums, we find that there were on December 31st, 1861, 5114 such lunatics in Ireland, of whom only 515 were resident in private establishments. Instead of 4599 in public asylums, there were on March 31st, 1861, 4502 lunatics, showing an increase of only 97 in nine months, whilst in the case of inmates of private asylums only two were added in that period, their numbers being 515 instead of 513.

The addition to our lunatic population in asylums in the three divisions of the country in the periods to which the reports refer, was 1589, and of this increase England alone contributed 1355, a circumstance which, if it represented the relative prevalence of insanity in this portion of the empire, might well give rise to alarming apprehension of a mental degeneracy of its inhabitants. However, such figures very remotely indicate the prevalence of mental disorder either in England or in other portions of this realm. The English Commissioners in their Reports deal exclusively, except by way of an occasional appendix, with the insane in licensed institutions, public and private, and inasmuch as its population is so much larger, and the development of such establishments has proceeded in England to a much larger extent than in the sister kingdoms, it follows that both the number of their inmates is proportionately larger, and the figures representing their movements,—the admissions, discharges, and deaths, assume a greater magnitude. This explanation must be admitted, so far as it goes, to be correct, still it cannot be sufficient and satisfactory in the face of such an enormous annual addition to the number of the insane in England as compared with what has taken place in the course of a year in Scotland. Doubtless this wide divergence of results in the two kingdoms admits of some other explanations, without assuming it to be a fact that the insane in England are multiplying at a fearful rate, an apprehension which the last report of the Commissioners in Lunacy was calculated to dispel.

We should be pleased to see a tabular statement annually put forth by the English Commissioners representing the whole state of lunacy in the country as far as discoverable; for surely, as a great social question, it is important to know what is the entire number of lunatics, whether found in recognised institutions for their detention, or in workhouses, prisons, or private houses. This information is presented in the Scotch Reports as far as it is attainable, and in the Irish returns there is a precise statement of the number in poor-houses and in prisons, and an approximate estimate, made through the instrumentality of the police, of all other lunatics in the country

not under the supervision of the Commissioners. On the other hand, the authorities in Ireland have not proceeded so far as those in England in their endeavour to discover and bring within their jurisdiction the numerous cases of single patients detained in private houses, and of which, from time to time, the English commissioners have attempted to give an approximative return.

Commencing with the more complete details furnished by the Scottish Board, we will extract the tabular summary published of the whole estimated number of the insane, and of their distribution :

Mode of Distribution.	M.	F.	Total.	Private.			Pauper.		
				M.	F.	Total.	M.	F.	Total.
In Public Asylums .	1353	1359	2712	391	375	766	962	984	1946
Private „ .	378	529	907	88	136	224	290	393	683
Poorhouses .	343	500	843	—	2	2	343	498	841
Private houses .	1840	1834	3674	1041	846	1887	799	988	1787
Total .	3914	4222	8136	1520	1359	2879	2394	2863	5257

These figures represent the actual number of lunatics in Scotland, ascertained officially, except in the case of those living in private houses, of whom the number given is only approximative. Of these the Commissioners remark that, during their first inspection, they “acquired knowledge of the existence of 1887 private single patients, —1041 males and 846 females; but in later inspections we have forborne to make any searching inquiries respecting such patients, as, for the most part, they are living with their families, and, consequently, are not subject to statutory visitation. As it is probable, however, that the decrease in their numbers, by removal to asylums, recovery and death, is at least compensated by the occurrence of new cases, and by the transference home of unrecovered patients from asylums, we continue to adopt the numbers formerly ascertained as still sufficiently accurate to be adopted in a general estimate of the number of the insane in Scotland.”

Of those detained in public and private asylums we found the number augmented during the year 1860, by 135; but from this increase must be deducted 23, representing a decrease in the lunatic wards of workhouses, and also 60, the number of pauper lunatics placed as single patients less than that of the preceding year (1859), making, together, a diminution of 83. Therefore the whole actual addition to the insane population of Scotland in the year 1860 was 135 less 83, that is, 52, a remarkably small increment, contrasting strongly with the returns for England, and also much beneath those for Ireland, as we shall now show.

The following summary occurs in the Eleventh Report.

	Lunatics.			Idiots.			Epileptics.			General Total.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
In District asylums .	1966	1968	3934	76	62	138	174	142	316	2216	2172	4388
Poorhouses .	227	441	668	470	547	1017	311	596	907	1008	1584	2592
Gaols .	207	118	325	—	—	—	—	—	—	213	126	339
Private asylums .	244	231	475	13	15	28	8	4	12	265	250	515
Central asylum .	87	38	125	2	2	4	1	1	2	90	41	131
Lucan Spa asylum (House of Industry patients) }	18	62	80	—	—	—	—	—	—	18	62	80
Convict prisons .	10	—	10	—	—	—	—	—	—	10	—	10
Total .	2759	2858	5617	561	626	1187	494	743	1237	3820	4235	8055

“Besides the above (add the reporters), from returns we obtained at the close of 1860, from every police district in Ireland, and in which the particulars as regards name, age, residence, &c., were given, there appeared to be an aggregate of 8991 human beings of all grades more or less mentally affected, of whom 1651 were lunatics properly so called, 5469 were imbeciles, and 4871 affected with epilepsy. We need scarcely observe that these returns, from the mode through which they were obtained, although, as stated in our last Report, every care was taken in their compilation, can only be regarded as simply approximative.”

In the above-quoted table, a discrepancy appears with respect to those enumerated as detained in gaols, for under the heading of lunatics 325 occur, whilst in the column of totals 339 are set down. To explain this we refer to p. 27 of the Report, where we find it stated that “321 lunatics committed as dangerous were still in custody;” whilst again, in the tables at p. 53, this same number 321 recurs in the one setting forth those who were confined in gaols as “dangerous lunatics;” in another, 11 are accounted for as persons in custody, “acquitted of offences on the ground of insanity,” and in a third, 7 are returned as remaining in gaol, “who were found to be insane on arraignment, and incapable of pleading.” On adding together these numbers, the total 339 given in the table, will be found correct, the error having crept in somewhere in the columns representing the form of mental disturbance.

Comparing the totals in this table with those returned nine months previously, an increase is seen of 58 in workhouse inmates, of 99 in the district asylums, of 2 in private asylums, and of 57 in gaols;—a total of 216. But from this must be deducted a decrease of 2 at Dundrum (central asylum), leaving 214 as the total increase in the period specified. In this estimate no account is taken of lunatics

resident in private houses or at large, who were, as already noted, approximatively numbered at 8991 by the police authorities at the beginning of 1860, and respecting whose increase or decrease during the succeeding year no data are furnished.

The English commissioners publish, as before remarked, no such complete summary of the numbers and mode of distribution of the insane in England and Wales as we are favoured with by the Scotch and Irish boards. In the absence of such a summary, we will, by the aid of the returns published by the Poor Law Board, supplement the summary of the English commissioners by an enumeration of lunatic paupers detained in workhouses or in lodgings or resident with their relatives, and by such means produce a table so far alike that its results may be compared with the statistics presented by the Irish and Scotch authorities, except with regard to private single patients, of whose numbers in England no estimate has been formed by the authorities.

A most elaborate return of the pauper lunatics, including idiots, in all the unions and single parishes in England and Wales, on January 1st, 1861, showing their number and place of maintenance in each, was prepared by Mr. Purdy, the principal of the statistical department of the board, and printed as a parliamentary paper in 1861; and a subsequent return of pauperism on January 1st, 1862, furnishes us with the numbers of pauper lunatics at this latter date. With the data so derived we have constructed the following tabular synopsis of lunacy in England and Wales on the 1st of January, 1861, but have been compelled, however, for reasons before stated, to omit the item of private patients living in private houses.

Mode of distribution.	M.	F.	Total.	Private.			Pauper.		
				M.	F.	Total.	M.	F.	Total.
In Public asylums	9579	11,163	20,742	1183	921	2104	8396	10,242	18,638
Private „	2095	2,008	4,103	1648	1370	3018	447	638	1,085
Workhouses	—	—	8,543	—	—	—	—	—	8,543
Private houses	—	—	6,115	—	—	—	—	—	6,115
Total . .	—	—	39,503	2831	2291	5122	—	—	34,381

14,658

The number of lunatic paupers of each sex in workhouses and private houses is not shown, but, taking the gross numbers, we find that the two sexes stand so related, that for seven lunatic pauper males there are nine lunatic females.

In compiling a table such as the foregoing, a considerable discrepancy appears between the returns made by the Poor Law Board and those by the Lunacy Commissioners with regard to the number of paupers maintained in asylums, public and private, and in hospitals

for the insane. Thus, on January 1st, 1861, the Poor Law Board makes a return of 18,262 pauper lunatics in such establishments, and the Commissioners in Lunacy report an aggregate of 19,723, an excess of 1461 individuals over and above the former number. This difference is explicable, at least in a great measure, by the circumstance that there are various unions and parishes in the country which make no returns to the Poor Law Board, though they together comprise a population of 247,741 persons; also that county patients and many criminal lunatics not chargeable to the poor-rates are omitted from the estimate made by the board.

Bearing these facts in mind, and allowing for these unnumbered lunatics in the Poor Law Board returns, we will construct a table for the year ending January 1st, 1862, similar to that above given for the previous twelvemonth ending January 1st, 1861. However, as unfortunately the special lunacy return by the Poor Law Board is not yet published, we have only the total of chargeable lunatic paupers not in asylums, and no further division of them according to their place of maintenance.

Mode of distribution.	M.	F.	Total.	Private.			Pauper.		
				M.	F.	Total.	M.	F.	Total.
In Public asylums .	10,136	11,671	21,807	1251	906	2157	8885	10,765	19,650
Private „	2,225	2,168	4,393	1704	1389	3093	521	779	1,300
Workhouses and private houses }	—	—	14,800	—	—	—	—	—	14,800
Total. . .	—	—	41,000	2955	2295	5250	—	—	35,750

The amount, 14,800 paupers in workhouses, lodgings, and resident with their relatives, is, as above intimated, approximate, owing to the absence of precise official information; nevertheless it is, we are persuaded, not far wrong, and, at all events, is within the actual number.

Comparing, now, the two tables for 1860 and 1861, a considerable increase in the number of the insane is manifest under every heading, and a total increment of 1500 in the latter year, of which the greater proportion by far (*viz.*, 1065) has taken place in the public asylums and hospitals for the insane. Moreover, if we further examine these tables, we notice that there has been a positive decrease in the number of private patients in asylums, a circumstance which renders the increase of pauper lunacy still more alarming. This increase may be attributed to accumulation of chronic insanity, but however this may be, it progresses year by year in this kingdom, and inevitably entails an increased expenditure. Public asylums are ever multiplying and being enlarged, but all this

increased accommodation does not prevent a constant rise in the number of pauper lunatics, both in private asylums, in workhouses, and in the private dwellings of the poor. This state of things is most unsatisfactory and painful, considering the great endeavours made and the enormous expenditure undergone to provide for the treatment of the insane, and the impression will force itself on most minds that the plans adopted hitherto must be in some measure at least ineffectual, and that our method of providing for the insane must undergo a material change.

Adding the totals in each of the three divisions of this country, we find that at the commencement of 1861 (January 1st) there were 55,430 lunatics and idiots known to the legally constituted authorities of the realm, leaving out of sight several thousands of private cases not recognised by those authorities, and which we have seen in Ireland alone approximatively estimated at 9000, a number slightly larger than that of the whole number in institutions under the supervision of the commissioners for that kingdom. During the course of the year 1861 this large total of 55,430 appears to have been augmented by an addition of 1800 other lunatics, elevating the insane population of the whole empire to upwards of 57,000, without reckoning single private cases in England and Ireland.

Taking the population of England, according to the census of 1861, at 20,061,725, and the number of lunatics as estimated at 41,000, the per-centage of the latter to the whole population is 0·204, or rather more than one fifth per cent., so that among about every 450 people in this kingdom, men, women, and children, there is one insane individual; or, taking the accepted estimate of the adult population twenty years old and upwards at 9,816,597, and allowing 6000 of the 41,000 for idiots and others mentally disordered under twenty years of age, the per-centage of adult lunacy is 0·36; or, in round numbers, there is one adult lunatic in every 300 grown-up individuals. We have not at hand the means of ascertaining the number of persons of unsound mind under twenty years of age, but we believe we much over-estimate them at 6000, for in 1862 the Poor Law Board returned only 674 as under sixteen years old out of the large number of 34,215 pauper lunatics chargeable to unions and parishes. Therefore the general deduction ventured upon, that there is one individual insane known to the authorities in every 300 adults, is within the mark. These computations refer only to the proportion of officially recognised insanity in the community, and could they be so extended as to comprise all the lunacy existing, or, in other words, could we add to the official numerical returns the number of the insane not accounted for in them, we should discover the ratio of insanity to the population to be considerably higher. Among these officially recognised insane are those lunatic

paupers belonging to parishes which make no returns to the Poor Law Board, and who are detained in workhouses or resident in lodgings or with their own relatives, also the large number of private patients, including a certain portion of Chancery lunatics not enumerated by the commissioners, living in their own houses or boarded out, together with the lunatics to be found in the Government convict prisons and reformatories, as well as in the county gaols; vagrant lunatics, and those of the army and navy not found in Haslar Hospital or any of the private asylums visited by the Commissioners in Lunacy.

By far the largest proportion of such unenumerated lunatics consists of private patients, living in private houses, who, if the estimate given by the Scotch board of such patients, after minute inquiry respecting their numbers, can be used as a standard in forming an opinion of the numbers probably existing in England, will constitute a large addition to the above calculated sum of the insane. For, as we have recorded, such cases are set down by the commissioners for Scotland at 1887, and there is a population of 3,061,251. Now, the population of England and Wales is 20,061,725, or rather more than four and a half times greater than that of Scotland; consequently, if the private single cases of insanity stand in the same ratio to the entire population as they do in Scotland, these cases will amount in England, in round numbers, to 12,000. And judging from the statistics of lunacy in the two kingdoms, we have good reason for surmising that this class of the insane may be even more numerous in England than in Scotland.

As to the other classes of lunatics unrecognised in the official tables, it will be a moderate estimate to put them together at 1000; this, with the sum of 12,000 just arrived at, gives a total of 13,000 to be added to the 41,000 insane officially enumerated, and the grand total representing the numbers of the insane in England and Wales will therefore be 54,000. This sum represents a per-centage of 0·26 on the entire population of England, and 0·55 per cent. on the entire population of the country, or one adult insane individual in every 200 who are twenty years old or upwards.

On making similar calculations for Scotland, we find that in a population of 3,061,251 there are 1,136 lunatics, and therefore that the latter constitute 0·26 of the entire population; or, in round numbers, there is one insane person in every 400. Assuming, as is usually done, that of the entire population one half is twenty years of age and upwards, then the ratio of lunatics to the adult population will be double that just calculated, or 0·53 per cent., a proportion almost precisely the same as just now determined in England. Some slight reduction, however, in this proportion is demanded, inasmuch as among the 8136 lunatics there is a certain number under twenty years of age; what this may be we are not in-

formed, as none of the tabular statements given in the Scotch report set forth the ages of the patients.

Not having the results of the last Irish census at hand, we are unable to extend these calculations respecting the number of the insane to Ireland.

Another point is the ratio of pauper lunacy to pauperism, and here we have, with regard to England, the precise statement from the Poor Law Board returns, that "3·69 per cent. of pauperism, on the 1st of January last, is ascribable to insanity, the lunatics being 2·64 per cent, and the idiots 1·05 per cent." So, again, with respect to Scotland, we have the calculation made by the Lunacy Board that paupers are in the proportion of 25·253 per 1000 of the entire population, and pauper lunatics in that of 1·717; whilst the latter are to the paupers as 68·002 in every thousand, a ratio not much less than double that ascertained in England. In the Irish report we discover no data for similar calculations.

The following instructive tables and comments we copy from the last (fourth) report of the commissioners for Scotland:

Years.	Numbers placed in Asylums.						General total.		
	Pauper.			Private.					
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1858	436	606	1042	193	213	406	629	819	1448
1859	476	555	1031	201	190	391	677	745	1422
1860	488	573	1061	166	215	381	654	788	1442
1861	475	586	1061	220	215	435	695	801	1496
Average..	468·7	580·0	1048·7	195·0	208·2	403·2	663·7	788·2	1452·0

Years.	Number of Pauper Lunatics on Jan. 1st.	Increase.
1858	4737	.....
1859	4980	243
1860	5226	246
1861	5257	31

As the number of pauper lunatics estimated in 1858 and 1859, *i.e.* just after the appointment of the commission, was probably considerably above the average, owing to an accumulation of old cases then first brought to light by the commissioners, the first-quoted table will more correctly indicate the progress of lunacy in the last three years named. And on examining that table it will be

seen to show "a remarkable steadiness in the annual production of lunacy, so far as this can be estimated from the necessity for asylum treatment, in its relative occurrence among the pauper and non-pauper classes of the community, and in the relative susceptibility of males and females." . . . It "likewise throws light on the causes of the supposed increase of insanity. Judging from the evidence it affords, this increase is almost entirely due to the accumulation of the numbers of the insane, and certainly not in any marked degree to a greater disposition in modern times to mental disease, for while, in the years 1858, 1859, 1860, and 1861, the admissions into asylums scarcely varied in number, the patients resident in such establishments showed every year a large and steady increase. Thus, on January 1st, 1858, their number amounted to 3965; on January 1st, 1859, to 4114; on January 1st, 1860, to 4350; and on January 1st, 1861, to 4462. It thus appears that the admissions are on an average about 230 in excess of the removals and deaths. This annual increase of the population of asylums, which, it should be noted, is confined to paupers, must add about £5000 a year to the expenditure for this class of the insane. On January 1st, 1858, the number of private patients in establishments was 1012; on January 1st, 1861, it was 992, or 20 less (the proportion of private patients admitted into asylums is to that of paupers as nearly 1 to 3). This constant growth of pauper lunacy and stationary condition of private lunacy deserve most serious consideration, and, as was pointed out in our last report, indicate either that a larger number of private patients are improperly removed from asylums or that a large number of pauper patients are unnecessarily detained in such establishments."

The preceding statements in general apply to the history of lunacy in England, as the following table we have constructed for the purpose sufficiently demonstrates, although, from the absence of official information, we cannot show the relative number of admissions of private and of pauper patients. On this matter, however, the previous table of the existing state of lunacy in England (p. 422) will throw some light by means of the columns indicating the relative proportion of pauper and of private patients remaining on January 1st, 1862.

Years.	Admissions.			Remaining January 1st.			Increase.	
	Male.	Female.	Total.	Male.	Female.	Total.	On each preceding year.	Total at end of 5 years.
1858	4042	4104	8146	10,493	11,817	22,310	1966	} 3890
1859	4528	4576	9104	10,827	12,084	22,911	601	
1860	4505	4735	9240	11,216	12,501	23,717	806	
1861	4460	4495	8955	11,673	13,161	24,834	1117	
1862	—	—	—	12,361	13,839	26,200	1366	

This table shows that in the period of the last five years the addition to the insane in asylums, by accumulation and increase together, has been 3890, and at the rate of 778 per annum. This amount comprises both pauper and private patients; but from the following table, which we compile, the separate and comparative increase of both classes may be computed.

Remaining January 1st.	Private.			Pauper.		
	Male.	Female.	Total.	Male.	Female.	Total.
1858	2508	2230	4738	7985	9,587	17,572
1859	2658	2231	4889	8169	9,853	18,022
1860	2696	2231	4927	8520	10,270	18,790
1861	2829	2287	5116	8844	10,874	19,718
1862	2955	2295	5250	9406	11,544	20,950
Increase in 5 yrs. }	447	65	512	1421	1957	3378

Thus, whilst private patients have accumulated in five years at the rate of 102·4 per annum, pauper lunatics have done so at the rate of 675·6 per annum.

The relative proportion of the two sexes among the private and pauper occupants of asylums is well deserving consideration, but we have not opportunity at present to work out this question, and unfortunately the commissioners, in their annual summary of admissions, do not distinguish private from pauper patients. At the same time, we would call attention to the larger proportion of males to females of the class of private patients, and to the contrary relation in the case of lunatics of the pauper class.

The ratio of recoveries to admissions in the public and private asylums, and in the licensed wards of poor-houses in Scotland, we find to be throughout 40·54 per cent.; for males 38·51, and for females 42·25. The ratio is stated by the commissioners for each description of establishment separately, as follows:—In public asylums the recoveries equal 40·52 per cent.; for males 39·87, for females 41·16. In private establishments they are at the rate of 32·14; for males 26·78, for females 37·50. In the wards of poor-houses they reach 46·24 per cent.; 42·76 for males, and 49·73 for females. The occurrence of a maximum of recoveries among lunatics in the wards of workhouses will be somewhat startling to most readers. But it is explicable without resort to the supposition of their excellence as places of treatment. These establishments have “high mortality, and a high proportion of admissions in comparison with the average number of residents. This last

feature is more particularly observable in those poor-houses in which patients are received for curative treatment, and depends, in a great measure, on the facilities which such establishments offer for disposing of patients suffering under temporary excitement from drinking or other causes, and who, without such facilities, would scarcely have been subjected to asylum treatment." Besides thus receiving a much greater proportion of slightly marked cases than do asylums, "the apparent number of recoveries in poor-houses is likewise occasionally increased by the discharge of patients from the lunatic wards, and their removal to the ordinary wards before recovery has been completely confirmed. Their condition is not such as to warrant unconditional discharge; but they are, nevertheless, removed from the roll of pauper lunatics, and are reckoned as recoveries." . . . "Table II, of Appendix D, affords strong evidence of the transient nature of the insanity of many of the patients admitted into the lunatic wards of poor-houses. During 1861, 1021 patients were admitted into public asylums, and 341 into lunatic wards of poor-houses; but the discharges of recovered patients during the first month amounted to only 19 from asylums against 39 from poor-houses. Under equal conditions, the discharges from asylums should have been 117." In the public Irish asylums, on 921 admissions there were 450 recoveries, or 49 per cent.; "and on the daily average (4348) under treatment," they amounted to 13·8 per cent. In England we find that in the public asylums, and hospitals for the insane the recoveries during 1861 were at the rate of 36·32 per cent. on the admissions, whilst in private asylums they only reach 29·85 per cent.

As to the ratio of deaths, not having returns furnished respecting the average numbers under treatment in the English asylums, hospitals, and licensed houses, we are unable to reckon its per-centage, but in the district asylums of Ireland the commissioners tell us that, "assuming it to be represented by 100, the mortality in them would be at the annual rate of 32 on the daily averages, and 70 on the total under treatment." To understand this rather enigmatical way of stating a per-centage, we turn to the statistical tables, and in Appendix B find that the total number of patients under treatment during the nine months (to which period the returns are limited) was 5210, and that in that time there were 221 deaths; consequently, the per-centage of the latter upon the former is 4·24. In the private licensed houses the deaths were 24, and the whole number under treatment 670; hence the per-centage of deaths was 3·58, and less even than that in the public asylums, where it must be admitted to be marvellously small. Lastly, in Scotland the deaths in the public asylums were at the rate of 7·96 per cent.; 8·733 for males, and 7·204 for females. In private asylums they equalled 7·32 per cent.; 7·207 for males, and 7·44 for females. In poor-houses the proportion



Seven of the West

From a photograph

ranged higher, being 12·50 per cent.; or 15·929 for males, and 9·09 for females.

In the foregoing remarks we have endeavoured to bring together a collection of facts respecting the prevalence of insanity in Great Britain and Ireland calculated to enlist the attention of every student of social science; for the care of the insane has grown to such dimensions as to become a subject in the internal polity of the kingdom of vast importance, and by the very rapidity of its growth one just now of great perplexity and difficulty. The question forces itself upon the mind, are we proceeding in the right way with respect to our mode of provision for the insane? or, as it has been curtly put, "What are we to with our lunatics?" The feeling has got abroad that the present system of providing accommodation for them has failed. To discover how far this sentiment is based in truth, and if found true, to devise a remedy, such statistical researches as we have briefly and imperfectly sketched, and many others bearing upon the increase and the accumulation of the insane, on the results of treatment in asylums and elsewhere, and on the curability and mortality of insanity, in its different stages, need be perseveringly prosecuted. The length to which this paper has extended forbids our attempting to enter further into such questions for the present.

J. T. ARLIDGE.

Group of seven Idiots, brothers and sisters, from a Photograph.

Contributed by Dr. F. W. A. BROWNE, Commissioner of Lunacy for Scotland.

In passing through an asylum I saw five odd and apparently aged men, seated together around a table and apart from the other patients. They smiled; spoke a few words; gabbled or jargonised. My companion said, "They like to dine together." On complimenting him for his attention to their wishes, he answered, "Oh, they are all brothers." On going to the department for females, I observed two quiet, elderly women, indulged in the same way. "These," said my guide, "are sisters, and sisters of the five brothers. They were the children of poor but industrious and self-supporting parents, who were somewhat eccentric, and believed to be cousins, or related. They are all, in different degrees, imbecile, ineducable, irresponsible, and incapable of guiding or maintaining themselves. They had, besides, a brother who disappeared, and was supposed to have been drowned in a quarry; another imbecile

sister still alive ; and two brothers and one sister, who were healthy."

I. Agnes W—, æt. 71, affectionate, especially to Thomas ; quiet ; inoffensive ; industrious ; speaks indistinctly. First row, first on right.

II. James W—, æt. 69, affectionate ; childish ; confused ; excitable ; does nothing. Behind Agnes.

III. Helen W—, æt. 65, affectionate and attentive to brothers and sisters ; tractable ; willing and useful as a worker in scullery ; neat in dress ; speaks intelligibly. First row, second on left.

IV. David W—, æt. 56, indifferent to brothers and sisters ; passionately fond of washing stockings and coarse articles, and of assisting the female servants ; will not work in garden. First row, second on right.

V. William W—, æt. 53, affectionate to brothers and sisters ; will work in garden, under guidance, but will not wash ; cannot speak intelligibly. Behind David and Helen.

VI. Thomas W—, æt. 51, affectionate to sisters, indifferent to brothers ; quarrels with James ; occasionally violent ; displays much interest in changes in establishment, and worked in garden until he lost the use of right hand. First row, first on left.

VII. Mungo W—, æt. 47, indifferent to brothers and sisters ; sometimes speaks to James ; solitary ; taciturn ; works laboriously in garden. Behind Thomas.

The Lunacy Amendment Act, 1862.

THIS new Act appears to us, on the whole, a wise and judicious measure of legislation. It must undoubtedly be accepted as the result of the agitation against the lunacy law, and of the inquiry of the special committee of the House of Commons, which ensued upon it about three years ago; and if we consider all the vices which were then charged against the Lunacy Law and its administration, and the large and sweeping measures of change which were proposed, we must accept this Act as a measure of amendment characterised by moderation, and a wise adhesion to existing forms.

It might indeed be called, an Act to extend the powers of the Commissioners in Lunacy; but the members of our Association will not forget the strong opinions which they expressed against the delegation of any part of the power of the commissioners to new officials; when it was proposed, first that an independent physician living in the immediate neighbourhood of every licensed house, should be the independent visitor and reporter on every individual patient; and subsequently that England should be divided into small districts under the supervision of a staff of sub-inspectors of lunacy. Their earnestly expressed wish that if any change took place, it should be an extension of the powers of the commissioners will induce our members to recognise in this Act the fructification of their own desires and opinions. Moreover, the extension of these powers is kept within moderate limits, and consists for the most part in the increase of visitation. It imposes two additional visits in each year to be made by the commissioners to each licensed house within their district, and by the visitors to each licensed house not in the metropolitan district; so that now each licensed house in the metropolitan district will be visited six times in each year, and each house in the provinces will be visited eight times in each year, namely, six times by the visitors, and twice by the commissioners. This is the amount of visitation which is imperative, but in addition to this, one or more of the commissioners have now power to visit any asylum or hospital for the insane, or licensed house, at any time and as often as they may think fit, and at such visits they will have the same powers as they enjoy at the regular visits. This provision is certainly more in accordance with common sense than the law as it stood before, which only enabled the commissioners to make the prescribed number of statu-

tory visits, whether the house was under the best or the worst management. Their time will be too fully occupied for them to be able to throw away superfluous visits upon any establishment where they may not think their visits are needful; and an amendment Act which did not give them full powers to visit whenever and wherever their presence may be thought needful, would indeed have been a lame and futile measure.

By section 31 two of the commissioners may order the removal of any lunatic from a workhouse, and direct him to be received into an asylum; an appeal, however, being granted the guardians to the Secretary of State. This power, needful as it is, even under present conditions, is likely to become more so, if the powers of the 8th section should be largely carried out, by which chronic lunatics selected by the superintendents, may, with the approval of the commissioners and the Poor Law Board, be removed from the asylum and accommodated in the workhouse. The 32nd section gives power to two of the commissioners to visit any pauper lunatic who is not in a workhouse, to call in the assistance of any medical man, and under his certificate to order the removal of the patient to an asylum. The 31st, 32nd, and 33rd sections, in fact, give the same power to two commissioners in sending pauper patients to asylums, as that already possessed and exercised by one justice; a very reasonable extension of their powers, which cannot be expected to work otherwise than beneficially, since it is not likely to be exercised except in instances where their knowledge and experience, and disinterestedness, are opposed to other qualities in local authorities.

The general purport of the most important clauses which we have not already commented upon, is as follows:—The 4th clause refers to a dispute about plans for an asylum for an union of counties, in which the courts of session, or committee of justices of one county, disapprove of the plans; under such circumstances the decision is placed in the hands of the secretary of state. The 5th section provides that plans for building or enlarging county asylums shall be accompanied by estimates of cost.

The 6th clause permits the visitors of an asylum to apply such sums of money received from non-contributing counties or boroughs as may be in excess of the ordinary maintenance rate, to the formation of a fund by which the asylum may be altered, repaired, or improved. Perhaps it would have been still better if the clause had gone somewhat further, and had directed the visitors of every asylum to apply these moneys in this manner; since there can be no doubt that the money is derived as a rent-charge on the buildings, and that therefore it ought to be applied to the maintenance of the buildings. In the majority of asylums it is still applied to diminish the maintenance rate; a mode of appropriation which not only

appears unjust in itself, but which renders it exceedingly difficult to institute any exact comparison between the finances of the different county asylums.

The 7th section enables the justices of a county or borough under contract for reception of their lunatic paupers into an asylum, to defray out of the county or borough rates so much of the weekly charge as shall represent the sum due to the asylum; that is, the sum paid as a rent-charge for the buildings, and which by the preceding section the visitors are empowered to appropriate as a building fund. This sum, however, which may be raised on the county or borough rates, must not exceed one fourth of the weekly charge—a limitation which seems to be too narrow, for in most of the asylums which receive borough patients under contract, the sum fairly charged for rent is considerably more than one fourth of the total for rent and maintenance.

In connection with this subject of contracts, it is worth noting that the original bill contained a clause to compel the justices of counties to admit boroughs into unions for providing asylum accommodation. As might have been expected, this clause was strenuously opposed; for whatever feelings of humanity the county magnates might entertain for the condition of poor borough lunatics, it was not probable that they would readily grant powers to the Secretary of State to throw open all their board-rooms to the tradesmen-magistrates living in the borough towns.

If Sir George Grey had ascertained in what manner the borough and county of Oxford ploughed together under the same yoke, before the time when Berkshire was added to the county element of the board, he would have been able to foresee the objections which have been raised to compulsory unions of counties and boroughs. But if the county men have been permitted to have their way in objecting to legislation which would render such unions imperative upon them, they have, we think, no right to object to any other feasible method, by which the pauper lunatics of boroughs of moderate size may be provided with accommodation in the neighbouring county asylum; and we do think that in withdrawing this clause, which under certain circumstances would have rendered unions of boroughs and county asylums imperative, Sir George Grey might fairly have stipulated that contracts upon equitable terms for the admission of borough patients into county asylums should be compulsory upon the counties under order from the secretary of state. Sir George Grey might in effect have said,—We will not, gentlemen of the counties, compel you to commingle in joint boards of management with gentlemen of the boroughs, but we will not permit your opinions and feelings to throw any impediment in the way of the proper care and treatment of a class of unhappy people very much dependent upon legislative protection. A proper asylum for the

reatment of pauper lunatics, is a large and complicated institution, and a borough with only forty or fifty lunatics chargeable on its rates, cannot be expected to provide such an institution for itself. We must therefore urge, and if needful compel you to admit them, on such just and equitable terms as will repay you for past expenditure, and guarantee you from future loss. Some legislative measure must, indeed, sooner or later be passed, unless the justices of counties and the visitors of their asylums generally and voluntarily act in this direction. There is a subsidiary point, however, which deserves the attention of the members of our Association, namely, the remuneration of officers for the care and treatment of patients admitted into asylums under new contracts. The superintendent of an asylum, for instance, has been engaged to take charge of the asylum provided for the care and treatment of the patients of a certain county; if, after a time, the size of his asylum should be increased, and his own responsibilities and cares doubled, perhaps, by the admission of a number of troublesome borough patients, it does seem reasonable that he should be paid for work which has thus been thrust upon him. We have been informed that the objections of superintendents have sometimes proved the greatest impediment to contracts for the admission of borough patients into our asylums; and it may well be supposed that the experience of other superintendents who have made no such objections, but who have had their labour and their pains for thanks and reward for the care and treatment of borough patients, may not have been without influence upon the minds of their professional brethren.

We hardly know what to think of the 8th clause, or to foresee in what way it will work. It enables the visitors of an asylum, and the guardians of an union, with the approval of the commissioners and the president of the Poor Law Board, to make arrangements in the workhouse for the accommodation of a limited number of chronic lunatics, "to be selected by the superintendent of the asylum, and certified by him to be fit and proper so to be removed." A limited number must mean, either a small number or a specified number, the number being fixed in the scheme to which the commissioners give their approval. The real responsibility, it will be observed, is made to rest upon the shoulders of the superintendent of the asylum who has to select the patients and to certify their quality, so that whatever goes wrong with the lunatics in the workhouse is likely to be attributed to the error of his selection. If it were possible he ought to see the manner in which his selected patients are accommodated and treated. Few superintendents, however, would have the leisure to visit union-houses; yet it seems probable that if this clause should be acted upon to any large extent, the visiting commissioners will desire to provide themselves with some local assistance in discharging this particular duty; and if the clause should be actively worked,

the next lunacy amendment act will probably provide such assistance.

The 11th section repeals a restriction in the old Lunacy Act, that visitors of asylums must not lease lands for less than sixty years, the absurdity of which was pointed out in these pages long ago. The visitors may now hire or take on lease for a year or any term of years; which indeed they have already done, though contrary to the law, for a law without a penalty is often found to be no very great impediment where men are doing a good thing with right intentions.

The 12th section will prove a great disappointment to the officers of asylums, since it refers to their superannuation, and since the latter part of it contains a provision which more than neutralizes the good intentions of the clause as it originally stood. The clause as it stood, for which the officers of asylums were indebted to Lord Shaftesbury, reduced the term of service for which a pension could be granted to them from twenty years to fifteen years, and provided that in calculating the amount of superannuation regard may be had to the lodgings, rations, or other allowances enjoyed. In committee the following rider was attached, under which we have no hesitation in saying, that no superintendent will ever enjoy a superannuation until he has a foot and a half in the grave, or unless he has had the good fortune to serve in some small homogeneous county in which the visitors completely rule the courts of session, and we fear we may also add, in which he has been more studious to make friends than to do his duty. The rider runs thus: "Provided that no annuity by way of superannuation granted by the visitors of any asylum under the provisions of this Act, or of the Lunacy Act, chapter 97, shall be chargeable on, or payable out of, the rates of any county, until such annuity shall have been confirmed by a resolution of the justices of such county in general or quarter sessions assembled."

The 13th section provides for the superannuation of a matron whose husband is already superannuated, said to be inserted for the benefit of one particular matron; if this be so, we can only say, that the interests of an individual may be better cared for in the legislation of the country than those of an important class.

The 14th and 15th clauses require that justices, on application being made to them for a licence, or for consent to additions to a licensed house, should take into consideration the report and opinion of the commissioners before such licence or such consent be granted. Perhaps it would have been well to have said, before such licence be refused, since wrong is quite as likely to be done by justices refusing a licence to a building in every way suited to the welfare of lunatic inmates, because it is near to some influential person who dislikes the proximity of mad people, as by granting a licence to some dilapidated building in some lone and sequestered spot, which, in

the opinion of nine justices out of ten, would be the very locality in which people out of society should be shut up.

The 16th clause provides that the medical men residing in or visiting licensed houses of which the proprietors are non-resident, should be approved of by the commissioners if the house is metropolitan, and by the justices if it is in the provinces.

The 17th section imposes a penalty not exceeding fifty pounds for each patient received into a licensed house beyond the number specified in the licence; and the 18th section allows two of the commissioners to permit a person who has been under certificates as a lunatic for five years, to be received as a boarder in a licensed house, with his own assent; a clause which probably goes quite far enough in providing for that voluntary seclusion in asylums which has of late years been so much advocated.

The 19th clause very properly relieves relieving officers from the responsibility of expressing an opinion as to whether "a lunatic is a proper person to be sent to an asylum." The 20th clause, on the other hand, imposes upon medical officers of unions the responsibility of declaring whether a lunatic in a workhouse is a proper person to be kept in a workhouse; and the 21st clause imposes a new form of return of the pauper lunatics in workhouses to be used by medical officers.

The 22nd section abolishes the necessity of medical certificates for placing in an asylum a person found lunatic by inquisition, the order of the committee and copy of the office order appointing the committee being substituted. Hitherto when a person has been found lunatic under the full and careful investigations of an inquisition, he could not be placed in an asylum without the, in his case, superfluous authority of two medical men certifying, *de novo*, to his insanity. Persons found lunatic under inquisition are also removed from the operation of the law of medical visitation which applies to other lunatics living as single patients.

By the 23rd section persons signing orders for the reception of a private patient into asylums, &c., must have seen the patient within one month prior to the date of the order, and must make a statement when the patient was so seen, in the order. This clause will necessitate an alteration in the form of order.

The 24th section prohibits any medical man from signing certificates for the reception of private patients in asylums, &c., who has either received a per-centage on the payments of private patients, or who is a *medical attendant* as defined by the Lunacy Act, chapter 100; that is, every medical man who shall either keep any licensed house, or shall attend in his medical capacity any licensed house, asylum, hospital, or other place where any lunatic shall be confined. As medical men may very fairly be divided into those who know something about insanity and those who know nothing about it, and as

the former class will almost entirely come under the denomination of medical attendants, it follows that the 24th section of this Act imposes the duty and responsibility of signing certificates of insanity upon that class of medical men who know nothing about the matter.

The 25th section very properly directs that notice of the death of any patient in an asylum, &c., should be sent to a relative; and section 26th enacts that the original papers shall authorise the detention of a private or pauper patient, although his status as private or pauper may be changed.

The 27th section gives the commissioners power to order the discharge of any patient from any asylum, &c., either of whose certificates being incorrect or defective, are not amended to the satisfaction of the commissioners within fourteen days. It would, we think, have been well if the commissioners had also been empowered to order new examinations and certificates to be made of the patient without discharging him from the asylum, &c., since it might well happen that a patient discharged on account of informal certificates during an attack of acute insanity, might thereby suffer the terrible mischief of losing his chance of cure, and all through the ignorance or obstinacy of the certifying medical man.

The 28th section requires that notice of the admission of any private patient should be sent to the commissioners within one clear day of the admission; the statement of the patient's condition being sent as before after two, and before the expiration of seven days. The next sections have been already referred to.

The 34th section enjoins upon the superintendent of every asylum to send each half year to the guardians of each union a statement of the condition of every pauper lunatic chargeable to the union. We trust that the commissioners will prescribe some form in which this shall be done; for if the superintendents should have to make a statement in such detail as to supersede the necessity of correspondence with the guardians as to the condition of individual patients, that, indeed, would be rather a heavy half-yearly task in asylums containing from five or six hundred up to a thousand patients.

The 38th section empowers the proprietor or superintendent of a licensed house or hospital, with the consent of the commissioners or visitors, according to the jurisdiction, to permit any patient to be out on trial for such period as he may think fit; and the 39th section imposes a penalty, not exceeding £20, upon any officer or servant who permits or connives at the escape of any patient from any licensed house. These two clauses do but assimilate hospitals and licensed houses to asylums, to which similar clauses have long applied. The next clause, however, the 40th, applies only to private patients, whether in asylums, or elsewhere. It enacts that letters addressed by patients to the commissioners, or to the committee, or to

visitors, shall be forwarded unopened, and that if addressed to any other person, such letters shall also be forwarded; unless, in the latter case, the person in charge of the patient prohibit it by endorsement, in which case the letters shall be produced to the authorities at their next visit. We have nothing to say against this clause as it stands in the Act; we have long given up all attempts to interfere with or control the correspondence of our own patients, and if the legal injunction that such correspondence shall be unfettered affords any assurance to the public that the inmates of asylums are fairly dealt with, such assurance will be cheaply given at the expense of embarrassing the commissioners with a large amount of waste paper. With regard to letters addressed to other persons than the commissioners and other authorities, there can be no doubt that the power of prohibition has been most wisely placed in the hands of the persons in charge. If this were not the case, the most mischievous results would ensue. Take the instance of a professional or commercial man, struck down with an attack of curable insanity, during which his great delight is to write to all his friends and acquaintance letters of which the unprincipled might take ruinous advantage, and which, at the very best, would be a publication of his state of mind as mischievous as an advertisement to that effect in the second column of the 'Times.' This clause, as it stood in the original bill, contained the extraordinary provision that letters addressed to other persons, should be forwarded *unopened*, unless by endorsement, &c., but luckily this was changed in committee.

Of the concluding clauses, which are useful amendments of an administrative kind, none requires notice except the 44th, which enacts that the superintendent of an asylum, or a person in charge of a single patient, shall transmit notice to the coroner of the death of a patient, and in default be guilty of a misdemeanour. This clause, which brings patients in asylums and single patients under the same law as patients in hospitals and licensed houses, will relieve superintendents of an irksome responsibility. Heretofore it rested with the superintendent whether he should send to the coroner or not, and in many cases it was by no means easy to determine the proper occasion to do so. If he sent for the coroner to see an epileptic who died with his face on the pillow, he might experience a rebuff for giving needless trouble, and the next time he might omit to send for him when an investigation would have elicited events which ought not to be concealed.

On the whole, this Act, although like all amendment acts it is neither systematic nor complete, is, we think, except in the few points we have indicated, a wise and judicious and satisfactory measure, and one which we trust will prevent the necessity for any meddling with lunacy law for some time to come.

Statistics of Insanity, embracing a Report of Bethlem Hospital, from 1846 to 1860, inclusive. By W. CHARLES HOOD, M.D., Resident-Physician of Bethlem Hospital, &c. &c.

DR. HOOD has a second time enriched our knowledge of mental disease, as it is founded upon numbers and the reflections they suggest. His present valuable contribution to the statistics of the insane is one of a series which we hope to see emanating from the officers of our large institutions, and we entirely echo Dr. Hood's earnestly expressed hope, that the Commissioners in Lunacy will recommend an uniform plan of statistical inquiry to be adopted in our county asylums, by which the present vague and unsatisfactory information contained in their reports may be compressed into form, so as eventually to become the basis of certain knowledge upon which the diagnosis and prognosis and treatment of the insane, may be conducted with some greater degree of confidence than we at present possess.

The admissions into Bethlem Hospital are dependent upon a selection of patients, conducted according to regulations, "which render ineligible all applicants who have been insane for more than twelve months, all who are afflicted with paralysis, epilepsy, or any other form of convulsive disease, all who have been discharged uncured from other hospitals, and all aged and weak persons and pregnant women; in addition to which those who are not recovered after the expiration of a year are dismissed." Such a selection must necessarily to a certain extent render any conclusions drawn from the statistics of Bethlem inapplicable to the general numbers of the insane; they are, in fact, the statistics of recent and uncomplicated cases of insanity, and as such are of themselves of great and special importance. The value of enumerated facts often entirely depends upon the discrimination of a limited class of subjects to which they apply. If the statistics of insanity were consulted, for instance, for the purposes of determining the probability of cure within a limited time of a recent and uncomplicated case of insanity, Dr. Hood's tables might be appealed to with confidence for a trustworthy answer; while from the tables of any county asylum in which a large proportion of the inmates are fatuous from age, or idiotic, or epileptic, and the proportion of curable cases resident is perhaps not ten per cent., no intelligible information upon the point could be obtained. We are inclined to think that no trustworthy comparison can be made between the results of treatment of such institutions as Bethlem and St. Luke's and those of county asylums, Hanwell and Colney Hatch, for instance; the character of the conditions of disease subjected to

treatment being so entirely and irremediably different, that the results can afford no test of the excellence of that treatment.

The per-centage of cures of insanity effected in workhouse wards is greater than that effected in any of our best institutions; but who would compare the modes of treatment, or think it worth while to dwell upon the bare fact, after receiving the explanation that the cure of insanity in workhouse wards means the cure of drunken excitement?

Dr. Hood thinks, and brings good reason from Esquirol, Prichard, and others, to show that the selection of proposed curable cases admitted into Bethlem is counterbalanced to a large extent by the limitation of residence permitted to cases. By comparison with the experience derived in the Salpetriere, 281 of the 643 cases calculated in the Bethlem report would have been cured if they had remained longer in the hospital, and that only 362 of the whole number would not have been cured: "a proportion," he says, "which still shows that the number of recoveries in Bethlem is somewhat increased by the present rules of the institution; for the 281 recoveries, which were not effected for want of sufficient time, must be considered as more than counterbalanced by the 385 incurable cases which were rejected. It is very doubtful, however, whether this conclusion is perfectly accurate, and there is some reason to believe that Bethlem Hospital may in reality be not so much the gainer in the matter of recoveries. There is ground for this supposition, inasmuch as the recoveries after the first year appear to be underrated rather than overrated. This may be gathered from the experience of the Retreat at York, which is, that nearly 50 per cent. of the entire number of recoveries occur after the first year of residence."

The following tables show, in detail, the movement of patients in Bethlem during the period embraced by the author's studies, and also during the last century:—

Patients admitted as Curable.

From 1846 to 1860 inclusive.

	Admitted.			Discharged.											
				Cured.				Uncured.				Died.			
	M.	F.	Total.	M.	F.	Total.	Per cent.	M.	F.	T.	Per cent.	M.	F.	T.	Per cent.
1846	125	168	293	66	95	161	54·95	—	—	—	—	3	7	10	3·41
1847	124	190	314	68	107	175	55·73	—	—	—	—	3	9	12	3·82
1848	118	188	306	74	82	156	50·98	—	—	—	—	2	9	11	3·59
1849	124	192	316	66	106	172	54·43	—	—	—	—	6	12	18	5·69
1850	135	209	344	74	123	197	57·26	—	—	—	—	20	11	31	9·01
1851	112	174	286	51	69	120	42·3	—	—	—	—	9	17	26	9·09
1852	101	167	268	49	94	143	53·35	—	—	—	—	15	12	27	10·07
1853	72	128	200	38	75	113	56·5	—	—	—	—	9	7	16	8·00
1854	77	110	187	40	70	110	59·35	—	—	—	—	4	7	11	5·87
1855	78	137	215	48	84	132	61·68	—	—	—	—	5	7	12	5·60
1856	61	110	171	41	70	111	64·91	31	47	78	45·61	3	3	6	3·50
1857	82	127	209	46	69	115	55·02	22	38	60	28·70	4	6	10	4·78
1858	68	142	210	33	79	112	53·33	16	42	58	27·61	7	5	12	5·71
1859	58	100	158	38	60	98	62·02	27	55	82	51·08	7	3	10	6·32
1860	75	116	191	41	62	103	52·02	20	32	52	26·72	5	5	10	5·05
	1410	2258	3668	773	1245	2018	55·01	116	214	330	35·14	102	120	222	6·05

Aggregate of the 100 years ending 31st December, 1860.

Admitted.	Cured.	Per cent.	Died.	Per cent.
19·649	8·539	43·45	1·481	7·53

The largely increased per-centage of cures, and the decreased mortality as shown in these two tables, are sufficiently satisfactory, though we do not doubt that the results of the present treatment at Bethlem, in comparison with the past, are but feebly represented there. The present system of treatment and management in Bethlem is well known to be everything which can be desired, and the past is well known to have included everything which could not be desired, and among other things, an absence of reliable records; and, as is well known, in loose records men rarely err on the side of giving themselves too little credit, we should be inclined to discount the per-centage of cures effected at Bethlem in the olden time, small as it is compared with the present, and to accept those which did occur as cures which *would* occur notwithstanding treatment rather than in consequence of it.

“The experience of Bethlem Hospital,” says Dr. Hood, “is, in many respects, very interesting. On the authority of Stowe, who derived his information from Dr. Tyson, the physician to the hospital

at that time, 1294 patients were admitted between the years 1684 and 1703; and of these, 890, or about 2 in 3, were cured; but between the years 1784 and 1794, when 1664 patients were admitted, the number of recoveries was 574, or only a little more than one in 3. We next learn from a report which Dr. Prichard obtained from Mr. Lawrence (*'A Treatise on Insanity,'* 1835, p. 141), that the number of recoveries increased after the hospital was removed to its present site. This record extends from 1819 to 1833. During this period 2445 patients were admitted; and 1124, or one in a little more than 2, were discharged cured."

We have always thought that Bethlem, with its princely revenue, ought to be the great middle-class asylum in the country—an opinion in which, we believe, its accomplished physician fully concurs. In the present pages his mind on the subject may be seen in the following paragraph on the education of the patients admitted:—"It appears certain that a very large proportion of educated persons are admitted into Bethlem: a fact which shows that little alteration would be necessary, so far as the patients are concerned, if it were thought desirable, to send the uneducated poor to the asylums which are provided for them on the most princely scale in every county, and to reserve Bethlem Hospital for the reception of the poor though educated insane of the middle class." The degree of education was found to be as follows:—Superior, 272; good, 865; moderate, 2152; indifferent, 293; none, 86. Total, 3668.

The extent to which Bethlem is still used for the treatment of patients for whom the county asylum would be more suitable, we do not learn from any of our author's tables. The tables in the fourth chapter, showing the social condition of the patients, certainly indicate what may be called a middle-class position. The upper and the lower crust of the Bethlem society may be taken to be represented by the members of the learned professions and by the servants and labourers. Of the former, among the male patients there were only 23, namely, 10 clergymen, 4 lawyers, and 9 medical men; of the latter, there were 12 labourers and 11 domestic servants. There were also 2 soldiers, 2 sailors, 4 policemen, 1 shepherd, 1 flyman, and some other unit instances of the classes scarcely above that of the labourer. The great bulk of the patients were of the artizan and tradesman class. It is remarkable that 115 female servants are enumerated to only 11 male servants—a wide difference, of which we cannot guess the cause. On the liability of different callings to insanity indicated by this table, Dr. Hood remarks—"It is to be noticed that the medical men are nearly twice as numerous as the lawyers; and this, perhaps, is what might be expected, when we consider the mental and bodily fatigue to which a large majority of the medical profession are exposed, for if it is sufficient to shorten the average duration of their lives appreciably, it must also affect

very seriously their mental health. Nor is it surprising that the number of schoolmasters and musicians should be so high. Under the head of schoolmasters are included a large number of tutors, which, no doubt, is a sufficient reason why schoolmasters, as a class, so considerably increase the list, for the unsatisfactory social position in which such gentlemen are too often placed, tends necessarily to fret and irritate their minds. Musicians, on the contrary, more excitable than the majority of the population, may be in danger, by being too much flattered in that society where they are constantly welcomed. The number of clerks is high, though not higher, perhaps, than the extent of this class would lead us to expect. Comparing the number of those engaged in *sedentary mechanical in-door pursuits*, with those engaged in *non-sedentary* mechanical in-door pursuits, we find a marked difference, the preponderance being with the latter. Among the former the tailors are most numerous, and then the compositors: among the latter, are first the carpenters and then the plumbers."

The seventh chapter treats on the residence of the patients admitted. From 1846 to 1860, 1609 patients were admitted from London and its immediate neighbourhood, and 2059 from the provinces; while from 1856 to 1860, 593 patients were admitted from London and its vicinity, and 346 only from the provinces. It would appear therefore, that between 1846 and 1856, 1609 were admitted from London, and 2059 from the provinces; but that in the subsequent period these proportions were reversed, and 593 were admitted from London, and 346 from the provinces. It speaks well for an institution that it is most used by the district in which it is best known, since any important change in the reputation of Bethlem as a hospital for the insane, would be much more fully and speedily known in London than in the provinces; but the above figures, which so unmistakeably prove that this great institution, which belongs to the country at large, confers the greater portion of its benefits within the bounded area of the metropolis, ought, if more known, to make the inhabitants of the provinces more alert to claim their share. There is no disposition, we believe, on the part of the authorities at Bethlem to give any preference to the Londoners, but want of information in the provinces, the difficulty of travelling to any distance with a lunatic patient, and the uncertainty of his being found a fit and proper subject for the hospital on his arrival, all tend to make this great charity less used by the inhabitants of the country than by those of the more well-to-do town population, among whom its enefits are certainly not more needed.

OFFICIAL REPORT.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS
AND HOSPITALS FOR THE INSANE.

A SPECIAL GENERAL MEETING of the Association was held at the Freemasons' Tavern, Great Queen Street, on Wednesday, the 17th of September, at 3 o'clock. The meeting was called, to receive Dr. Bucknill's resignation of the editorship of the Journal, and to make arrangements for its future management; and also to elect Drs. Bucknill and Hood to be honorary members of the Association. The following members were present. Dr. Conolly, Baron Mundy, Dr. Sankey, Dr. J. S. Bushman, Dr. W. Take, Dr. Paul, Dr. Ross, Dr. R. H. Burnett, Dr. Manley, Dr. Christie, Dr. Millar, Dr. Hitchman, Dr. Duncan, Dr. J. F. Duncan, Dr. Henry H. Stewart, Dr. J. Strange Biggs, Dr. M'Cullough, Dr. T. Thurnam, Dr. Robert Stewart, Belfast; Dr. C. H. Fox, Mr. Ley, Dr. Robertson.

Dr. Kirkman, the president, occupied the chair.

The President.—Gentlemen, this is a very important meeting of the Association; and without further preface, as we shall have plenty to do, I will call upon Dr. Robertson to read the notice convening the meeting.

Dr. Robertson, having read the notice, said—This meeting is called in accordance with precedent established by Dr. Conolly, who, when president, held two general meetings to consider the new lunacy laws, which, in the year 1859, were before the House of Commons. Dr. Kirkman, in consultation with the committee, determined that, under present circumstances, he would call a general meeting to deal with this important question of the editorship of the Journal until the next annual meeting of the Association.

The President.—If you will allow me, I will now read a letter which I have received from Dr. Bucknill, containing his resignation. I must say I do so with mingled feelings of regret and pleasure—regret that we have lost Dr. Bucknill as the editor of the Journal, and pleasure that we shall not lose him as an associate and friend. I am sure that in everything connected with the interests of the Association he will always be active and energetic.

The President then read the following letter :

“DEVON COUNTY ASYLUM; Sept. 16, 1862.

“Dear Mr. President,—The Lord Chancellor having conferred upon me the appointment of Chancery Visitor, it has become necessary that I should resign into the hands of the members of the Association

the office of Editor of their Journal, with which they entrusted me nine years ago.

"I have much pleasure in looking back upon these years of editorial labour, which I have incurred at the bidding of the Association, as time which has not been ill spent in advancing the knowledge of our specialty, and in aiding and directing well-intentioned efforts to promote the interests of that most afflicted portion of our fellow-creatures whose remnant of comfort and happiness in this life is so intimately dependent upon our knowledge and our humanity.

"I have to offer my heartiest congratulations to my fellow labourers in this work, and to assure them of my continued interest in its advancement. I think I shall not be out of order if I show this interest at the present time by addressing a few words to you on the choice of my successor. I earnestly hope that you will be enabled to entrust the responsibilities, which I have had the honour to bear, on a gentleman who will discharge them with discretion and temper, and who, taking a comprehensive view of all matters bearing upon the welfare of all classes of the insane, and upon that of all those whose real interests are bound up therewith, will conduct the Journal in that spirit of impartiality which will give weight to its opinions, and reflect honour upon the Association.

"It affords me much pleasure in being able to express my own conviction, that the Association would find such an editor in my friend Dr. Robertson, to whom we are already under so much obligation for the long and zealous discharge of the duties of General Secretary. My new office prevents my acting as a member of the Association, or I should have attended to-morrow to have proposed and voted for Dr. Robertson. I feel myself, however, still at liberty to express my opinion, and I do so with the full assurance that the members of the Association, who for so many years have kindly placed some value upon it, will give it their best consideration. I do not see where the Association will be able to find a fitter man to be the editor of their Journal than Dr. Robertson, who has so zealously done the work of the Association for the last seven years, who has been one of my ablest coadjutors in the Journal, who has devoted himself to the study of psychological medicine during the whole of his professional life, and who is well known to many of the members of the Association as a gentleman and a man of honour, against whom no shadow of suspicion can attach that he might be capable of making the Journal serve indirect or personal ends.

"Allow me, before I conclude, to say a few words on another subject. An attempt has recently been made to persuade you that your Journal ought to be largely devoted to the exposition of your grievances. If anything could more readily than another bring your Journal into contempt, it would be an undignified system of querulous complaint. But when a real and general grievance exists, not

only ought the Journal to declare it plainly, as it has done in several instances, but the Association itself ought to take action if any useful mode of action should be open to it. Such a grievance does appear to me to have been inflicted upon many of the members by the amended form of the 12th section of the Lunacy Acts Amendment Act. This 12th section was introduced with the intention of conferring a large benefit upon the officers of asylums by reducing the term of service under which a pension could be granted from twenty to fifteen years, and by allowing the amount of the pension to be calculated upon the value of lodgings and allowances in addition to the salary. This good intention has been defeated, and the officers of asylums left in worse case than before, by a rider appended to the original clause, by which 'rider' it has been enacted, that no such superannuation shall be chargeable on or payable out of the rates of any county until it shall have been confirmed by the justices in quarter sessions. In all counties this provision will be a great impediment, while in some it will amount to a prohibition of all superannuations. The first superintendent to whom I pointed the clause out said, 'In my case it would entail the concurrence of the sessions of two counties and of three boroughs, which would be impossible.'

"You are not unaware of the interest I have long taken in the efforts made to obtain just provisions for superannuation, and on the ground of this long continued interest I would beg to suggest that, at your meeting to-morrow, you should appoint a committee, not with any vague and impossible mission of general interference with legislative measures, but with the definite object of obtaining a reversal of the latter portion of the 12th clause of the recent Act, and to press for legislative sanction to satisfactory superannuation arrangements. I would beg to suggest that, in such arrangements, a distinction ought to be drawn between those asylum officers and attendants upon whom falls the heat and burthen of responsibility in the treatment of the patients, and those who are engaged in less arduous duties. At present the superannuation of asylum chaplains and stewards stands on exactly the same ground as that of the medical officers of asylums; and it is worthy of remark that the new Act contains a clause (sect. 13) providing for the superannuation of matrons who are the wives of officers already pensioned. After yourself, my dear sir, the Nestor of superintendents, I have been the longest in office as the superintendent of any county asylum. It is now eighteen years and a half (18½) since I was elected to the office of medical superintendent to the Devon County Asylum, and although in resigning that office I lay aside all personal interest in this question of superannuation of the officers of asylums, I beg you to believe that I am incapable of becoming indifferent to the general interests of my old friends and associates.

"Allow me, dear Mr. President, to tender to you and the Association the expression of my sincere regard, and to remain

"Very faithfully yours,

"DR. KIRKMAN,

"J. C. BUCKNILL.

"President of the Association of Medical Officers
of Asylums, &c. &c."

Dr. Conolly: Mr. President and gentlemen, I suppose it will be the wish of the members present, that they should express to Dr. Bucknill their thanks for his services, and should give a cordial reception to his letter, and the sentiments expressed in it. I have not had the advantage of knowing what the subject of the letter was, but it confirms, I think, what I have endeavoured to express in a short resolution, which I beg leave to submit to the consideration of the meeting. That—

"The members of the Association, sincerely congratulating Dr. Bucknill on his appointment to the important office of Visitor to the Chancery Lunatics, have to express their regret that the responsible duties now devolving upon him are incompatible with his continued superintendence of the 'Journal of Mental Science;' and on receiving his resignation of its editorship, beg to offer him a grateful and cordial expression of their appreciation of his valuable services during a period of nine years. They feel assured that Dr. Bucknill will not cease to take an interest in whatever relates to psychological science and its application to medical treatment, and they trust that he may long enjoy his increased opportunities of promoting the welfare and the protection of the insane, and the real interests of the medical profession in relation to insanity, and which they believe to be inseparably connected with the real advantages of the community."

I beg merely to submit this to the meeting, not to be at all the interpreter of their sentiments. This resolution of course contains my own views, and I beg leave to propose it in that form, or in some similar form, so that the feelings of the meeting be expressed to Dr. Bucknill.

Dr. Hitchman: As one who has long admired the transcendent ability of Dr. Bucknill, the unwearied energy, the great zeal and high moral courage he has shown in conducting the Journal, I beg to second the proposition that has been proposed by Dr. Conolly.

The President put the resolution, and it was carried unanimously.

Dr. Robertson: The next subject which we have to bring before the meeting to day is the election of Drs. Bucknill and Hood as honorary members of the Association. It has always been our practice, as in the case of Dr. Gaskill, and in the case of Mr. Wilks, and also in the case of Dr. Browne, when he was elected Commissioner in Scotland, to offer the honorary membership to gentlemen who have been promoted to official positions, the business of which pre-

vents their coming and taking part in the proceedings of the Association. I am sure the Association will feel that we do well to make this offer to Drs. Bucknill and Hood. The other night I was reading one of Shakespeare's plays, and I met with a passage which seemed to me so appropriate to the present occasion that with these lines I shall leave my proposal in your hands :—

“ Who shall go about
To cozen fortune and be honourable
Without the stamp of merit ?
Let none presume to wear undeserved dignity.
Oh, that estates, degrees, and offices,
Were not derived corruptly !
And that clear honour were
Purchased by the merit of the wearer.”

I am sure no clearer honour was ever purchased by the merit of the wearer than in the case of both Dr. Bucknill and Dr. Hood in their recent advancement to the offices which they hold, and which I hope they may long continue to fill. I beg to move that Drs. Bucknill and Hood be elected honorary members of this Association.

Dr. Maudsley : I have great pleasure in seconding the resolution, which must commend itself to the unanimous approbation of every member of the Association. I am sure that we are all heartily glad that the Lord Chancellor has made two such excellent appointments, and we shall be equally glad to see the names of two such distinguished men among our honorary members.

The President put the resolution, and it was carried unanimously.

The President : I have now to read to you another letter of resignation which I have received from Dr. Robertson.

“ HAYWARD'S HEATH ; Sept. 17.

“ Dear Dr. Kirkman,—I beg to place in your hands the resignation of the office of General Secretary to the Association, which I have now held for seven years. In so doing I would desire to express to the Association my thanks for the consideration with which they have on all occasions received my poor efforts in their service—a service which to me has thus always been a labour of love.

“ Believe me,

“ Sincerely yours,

“ C. L. ROBERTSON.”

The President also read a letter from Mr. Ley, resigning the office of Treasurer.

Dr. Thurnam : With reference to the last letter, I beg to suggest to the meeting that we ought not hastily to receive the resignation of Mr. Ley, for really this is not the ordinary occasion for appointing the officers of the Association. We are summoned to-day for the special purpose of filling offices rendered vacant by the resignation of Dr. Bucknill. I hope we are not going to be called upon

to receive the resignations of all our officers, for I fear if we accept the resignation of the Editor, the Secretary, and Treasurer, the next resignation will be your own as President, and we shall be an un-officered Association. I really hope that Mr. Ley will not press his resignation. I do not see that his case is at all mixed up, or in any way hangs upon, the vacancy which unhappily in many respects we may say is now before us.

The President: I have received six or seven letters from Mr. Ley, some of which I have in my pocket, and he wishes distinctly to have his resignation brought forward to day. We are now only making appointments *pro tem.*; they must be confirmed at the Annual General Meeting. Whatever appointments are made to day will be subject to the confirmation of the Annual Meeting.

Dr. Thurnam: I hope it will not be inconvenient to Mr. Ley to hold his office until our Annual Meeting. The letter which has been read does not imply more than a wish to be relieved.

Dr. Robertson: It is one of a series of letters which he has been writing ever since Dr. Bucknill resigned. He says his work was bound up with Dr. Bucknill's, and he does not wish to continue his duties under a new editor.

Dr. Thurnam: We are hardly in a position to accept his resignation at the present time. The meeting is called for a special purpose, and special duties will only be transacted to-day.

Dr. Robertson: I do not suppose Mr. Ley will press his resignation. I shall be willing to be the interpreter of the feeling of the meeting to Mr. Ley.

Dr. Stewart: I think, Mr. President, it will be altogether out of rule, as my friend Dr. Thurnam has remarked, to accept Mr. Ley's resignation. We are assembled here for the special purpose of appointing those officers who must be appointed, owing to certain changes which have taken place by the promotion of others; but on the present occasion to act upon that letter of Mr. Ley would, I think, with very great respect to him, be entirely going outside our duties; in fact, we have no power to accept it. This meeting is called for a specific purpose, and we certainly have no right to go beyond that object. It would be quite irregular, and independently of that I should be sorry that we should lose the services of Mr. Ley, who has so long held the responsible office of Treasurer, and so satisfactorily discharged his duties. Under any circumstances, I think he might, as Dr. Thurnam has suggested, retain the position in which he has given so much satisfaction, until the regular Annual Meeting of the Association.

Dr. Robertson: I shall be very happy to convey that expression of feeling to Mr. Ley, and I have no doubt he will be satisfied.

Dr. Thurnam: Mr. Chairman, I have been requested, since I came into this room, to propose a gentleman to fill the office of Editor of the Journal for the nine months which remain, until our Annual

Meeting in July next. In doing so, I would make very few observations. It appears to me, as it has been suggested in the letter which you have read, that it is a very important function which this meeting is called upon to perform—the appointment of a successor to Dr. Bucknill, a gentleman who for more than nine years has filled the office of editor with great ability, and to the general satisfaction of the members. I am not here to defend every sentence which has appeared from his editorial pen in that Journal. On many occasions, I could not subscribe to many sentiments which have there appeared; but in the main I am prepared to say that the Journal has been edited with great skill, and very much to the advantage of the members of the Association. Therefore, I am extremely anxious that for the future we should have an equally able and equally discreet editor. Sir, I looked at the rules of the Association yesterday, for I was not able to do so before, having been absent from home for two or three weeks, and it appears to me that this meeting, summoned under your authority, is not competent to elect an officer of this description, who shall be the permanent editor of the Journal. We can only fill up temporarily the office of editor, and finding that Dr. Lockhart Robertson, who for so long a period has filled the office of secretary, is willing to take upon himself the new functions of editor of the Journal, I very much rejoice at it, and I have great pleasure in proposing, that until the next Annual Meeting in July, Dr. Lockhart Robertson be elected editor of ‘The Journal of Mental Science.’ In electing him, I believe we shall have every guarantee that the functions of editor will be discharged with advantage to the Association.

Dr. Burnett: Mr. President, before the resolution is seconded, allow me to make a remark. I think I have a right to be heard now. Am I correct, sir?

The President: No; the resolution has not been seconded.

Dr. Burnett: But before it is seconded.

The President: No; I think it should be seconded.

Dr. Campbell: Mr. President, I have much pleasure in seconding the nomination of Dr. Robertson. So far as I know that gentleman, I think we cannot do better than appoint him during the next nine months to conduct this Journal, which has been so ably edited before by Dr. Bucknill. I am fully aware of the difficulty of recommending a gentleman to fill Dr. Bucknill’s place, but I believe we shall find in Dr. Robertson a gentleman who is thoroughly qualified to discharge the duties of the office with credit to himself, and with advantage to the Association.

Dr. Burnett: Mr. President and gentlemen, I have attended this meeting for the purpose of hearing a discussion upon the election of the new Editor of the Journal, and I hope the subject will be discussed before we separate this afternoon. It is quite unnecessary that I should tell you that the editorship of this Journal, situated

as the editor is in relation to the Society which he undertakes to represent, is one of no trifling importance. I am sure I do not speak invidiously when I tell you that there are very diverse interests represented in this Association. I do not think it is at all an unusual thing, where the interests are so wide apart, to have two or three descriptions of editors—that is to say editors not all selected from one particular class as representing the Association. I can instance an example of that by alluding to the appointment of the Bishop of Jerusalem, which you know is taken alternately by this country and by the kingdom of Prussia. And also in many of our ecclesiastical appointments, the appointment rests sometimes with the Crown, and sometimes with the See. In this case, I think it is a very important thing that the editor of the Journal should be a man not holding exactly the same position with the Association as the editor that went before. About nine years ago, I think it was, when Dr. Bucknill was appointed editor, I made the proposition that he should be the Editor of the Journal,* and I did so because I thought the interests of psychological medicine were going rather too much in one direction, and I thought I should like to see a little restoration of the balance. Now we have had Dr. Bucknill nine years, he has advocated the cause of the Association with much credit to himself, and with great satisfaction to all the members of the Association, but at the same time I do hold that a society like this ought not to be fettered, and that we ought to have a free representation of the interests of all. Without saying anything more, I beg, therefore, to propose that the editor should be elected from one of the proprietors of private asylums; that instead of electing a man who represents the superintendents of county asylums, we should this time elect the proprietor of a private asylum.

Dr. Tuke: It seems to me that Dr. Burnett's proposition is monstrous, that we should select a man from a special class. Our object should be to get the best man in the right place. Therefore, I do not see that we are in any way called upon, or that we ought in any way to commit ourselves to say that the editor of the Journal should be a public man or a private man. Let us get the best man we can in the place. Therefore, I think we ought to negative Dr. Burnett's proposition.

The President: Dr. Burnett, have you any one that you would wish to propose as editor?

Dr. Burnett: I do not wish particularly to propose any one member; I did not come here with the design of proposing any particular member, but I did come intending to support that prin-

* [On referring to the minute-book of the Association, we find that at the meeting at Oxford, in 1852, when the establishment of a journal and the election of an Editor were determined upon, Dr. Burnett was not present. Dr. Bucknill's appointment as Editor was proposed by Mr. Ley and seconded by Dr. Thurnam.—*Ed.*]

ciple which I have now stated, because I believe it to be a sound one. If you recollect, before Dr. Bucknill was appointed, we were very much dependent upon the editor of 'The Psychological Journal,' who was the proprietor of a private asylum, therefore, you see the principle has been acknowledged before. We have acted upon it, and it was in order that it should not be carried all in one direction that I supported Dr. Bucknill, and it was by my resolution that he was elected editor of the Journal. Now, I say we have had a physician of a county asylum as editor, and the time has again recurred when we should select the editor from one of the private asylums. I really do not wish to dictate who should be the editor, but if you ask me to name a member on the spur of the moment, it has occurred to me, in consequence of receiving Dr. Bushnan's circular, that he is a man qualified for the office. He is calculated to advocate the cause of psychological medicine, he is a man who has been accustomed for many years to edit public journals, he has seen and had a good deal of experience in literary matters, and I think he is quite as calculated to uphold the integrity of our society as Dr. Lockhart Robertson himself. I do not see why he should not be elected, nor why he has not, in fact, a higher claim, on account of his previous experience. I should say he is a much superior man to Dr. Robertson, because Dr. Robertson has not had any experience as the editor of a journal.

Dr. Harrington Tuke: Will you allow me to point out to Dr. Burnett that we have already got his *beau ideal*. We have already a gentleman at the head of a journal who is connected with a private asylum, therefore, if there is any question which Dr. Burnett thinks could be properly canvassed in that journal, he could at once apply to that gentleman. I think it is very undesirable, indeed, that we should divide our meeting upon the question of public and private asylums. We ought to avoid as much as possible the question ever arising. We meet here as physicians on the footing of perfect equality, and I would deprecate exceedingly any resolution that would divide us on that point. For myself, I shall vote for Dr. Robertson. I am perfectly sure that that gentleman will deal justly with every member of the profession, whether engaged in the private, as it has been called, or the public practice of it.

Dr. Burnett: I may, perhaps, be permitted to make one remark before anything further is said. I have not divided the meeting, because the principle was acted upon nine years ago. We changed from a proprietor of a private asylum to a physician of a public asylum, therefore it is no division of the meeting. But there is another reason why I should oppose Dr. Robertson's election. It is simply this: I will state it to the whole meeting, and I am quite certain the great body of the meeting will go with me upon it. I do not think it is right for one who has resigned his appointment to

dictate to the meeting who shall be his successor, nor do I think it is a matter for the Council to take into consideration, because we should come here under such circumstances to receive the dictation of the council; we should not be a public body. Under those circumstances I do say everybody has a right to be heard. I do not want to have any personal remarks. With regard to proprietors of asylums, many of them, I believe, to be the greatest men I am acquainted with; at the same time, I do not think it is right that I should be looked upon as wishing to divide the meeting, simply because I wish to ventilate the question, which is of great importance to the whole profession.

Dr. Thurnam: May I be allowed to make one observation? I think some misconception must have arisen on the part of Dr. Burnett. I have been connected with this Association from its earliest institution, some twenty years ago, and I am not aware of any journal or periodical emanating from this Association edited by a gentleman holding office in a private asylum. I do not recollect any such circumstance.

Dr. Burnett: I say we had no journal at all, therefore our interests were advocated by 'The Psychological Journal.'

Dr. Thurnam: You said a change had been made some nine years ago, when Dr. Bucknill was elected, and now was the time to revert to the former precedent. I may have misunderstood Dr. Burnett.

Dr. Burnett: So far it was a change, that instead of our interests being advocated by 'The Psychological Journal,' from that time forth our interests were advocated by our own editor.

Dr. Thurnam: As an Association we were entirely independent of that journal, and had no connection whatsoever with it. It was entirely a private speculation, with which we had no concern. It was in existence then, and is in existence still. I would venture to say, in reference to what Dr. Burnett has said, it appears to me, Mr. Chairman, with submission to you, that it is perfectly competent for any gentleman here to propose any gentleman whatsoever as editor of the Journal. There is not the least feeling in the matter. I am sure I would not have ventured to submit this resolution to you had I supposed I was coming here with the object of dictating to the meeting who should be the editor of the Journal. This meeting is entirely open; but we, as a committee, I imagine, were not out of order in coming prepared with our views on the subject, and in submitting them to the meeting; but that does not at all prevent any other gentleman rising in his place, and proposing any gentleman whatever to fill this office.

The President: It strikes me that it is not simply the editor of the Journal you are so much considering, or the interests of the Association alone, but you are considering an appointment which is connected with the interests, not of the insane of England only, but

of the insane of the civilized world, for I do believe, with reference to our Journal, if I may make use of a quotation, "There is not a speech or language where its voice has not been heard;" and when I remember that Dr. Robertson has been very much associated with our foreign members, I do think he has a powerful claim upon us. I should be sorry to state anything from the vantage-ground of this chair, but I most cordially echo the opinion that Dr. Tuke has advanced, and also Dr. Thurnam.

Dr. Burnett: I beg, as an amendment, to move that Dr. Bushnan be the new editor. If anybody will second that proposition it will set the matter at rest.

The President: It is proposed that Dr. Bushnan be the future editor of the Journal; does any gentleman second that resolution?

Dr. Wood: Perhaps I may be a little out of order in saying anything before this is seconded, but I should like to suggest to Dr. Burnett the expediency of withdrawing his motion before it is seconded. I feel strongly that it is desirable we should have no division here. All our interests are in common, and they will cease to be in common if there is division in the camp. I repudiate the notion of attempting to appoint a man because he belongs to this or that branch of the profession. I think as our friend here, Dr. Tuke, has very well said, we want the best man, come from where he may. I do not think we are quite in a position at the present moment fairly to balance the claims of rival candidates. Therefore I think it is much better, as it is only a provisional appointment, that we should be unanimous in it. We should have the opportunity in the spring, first of seeing what the new editor can do, and then in a more satisfactory manner than I think we can do now, of making a final appointment. The only way in which I think we can meet the difficulty, for I feel it is a difficulty, is, that we should consent to this provisional appointment. We presume it has been proposed by the committee to appoint Dr. Lockhart Robertson provisionally for the next nine months. As that time approaches, we should be able to determine whether Dr. Robertson or doctor anybody else would be the proper person to be put forward. Then I would suggest that the form of election should be something different from canvassing a man's merits before his face. I think by that time we may all become acquainted with the claims of the respective candidates, and let each man who proposes to be a candidate, send a circular round, so that each member of the Association may have the opportunity of forming his own opinion, and then let the voting be by ballot.

Dr. Tuke: I rise to order on this matter. Dr. Wood has risen, and has asked permission to suggest that Dr. Burnett should withdraw his resolution, and now he is making a speech about how we shall conduct the election next year. I am entirely in the hands of the meeting.

Dr. Wood: So am I. I am going to ask Dr. Burnett to withdraw his motion, and I am only saying what I do now as a reason why I think it would be desirable to do so. If my friend thinks I am out of order, as perhaps I may be, I am quite willing to sit down. I have very little more to say, except this,—that I do feel very strongly it is of the greatest possible importance that we should have no division; therefore, on that ground especially, I would ask Dr. Burnett to withdraw his motion.

Dr. Burnett: I should be very sorry, indeed, to be the cause of dividing this meeting, and I only lament that you allowed Dr. Wood to put it upon that ground, because I commenced my observations by saying, “We are all a brotherhood;” and it is to prevent anything open to suspicion—which I am certain has been pretty freely suggested, because it could not have reached my ear unless it had been so—it was to prevent anything of that kind that I proposed to restore the balance, that there should be no cause for division; but, depend upon it, if you persist in always electing an editor from the county asylums, the Society will not always be as united as it is now. I am certain it will not be. It is all very well for men to say at these meetings they hope this and feel that; but, after all, it is acts and not words that we wish to be guided by, and therefore I am very anxious that an understanding should take place at once. I have no ill feeling towards any man; I have no wish to show any ill feeling. Here, especially, I feel I am amongst my brothers, and therefore I should be very sorry to do anything to divide the meeting. I do not think, because I do not withdraw the resolution, that I ought to be represented as standing here to divide the meeting; I do not think that is right. It is a perfectly free and unfettered meeting; and I think the resolution I have proposed ought to be put.

The President: Does any gentleman second Dr. Burnett’s resolution?

The resolution was not seconded, and it consequently fell to the ground.

Dr. Conolly: Gentlemen, I am going to take the liberty of making a few observations upon the general bearing of this matter, and in doing so I rather appeal to you as a very old member of the profession, one gradually retiring from all the active duties of it, and with no ambition and no personal object whatever in what I say. I very deeply regret that there should be even the appearance of division in an assembly of gentlemen, all of whom we know to be engaged in such honorable service, and most of whom we have the happiness of knowing also as men who have shown that they possess high attainments, both intellectually and morally. I trust that if there is any little feeling of this kind, it will be allowed to die away, for you must remember, gentlemen, that there is no section of society, I really believe there is no section of society which labours under more

misapprehension and greater disadvantage than our section—the speciality of attending to the interests of the insane. We really may be said to be people who have no friends (hear, hear). The public are entirely ignorant of all our highest duties, and have no appreciation of them at all. The tendency of almost every legislative movement is to confer some new disadvantage upon us, or to throw some insult or affront upon medical men who are engaged in this department of practice. As for the public in general, we know that they have not any sensible notions upon the subject, and that everything depends upon the exertions of medical men who are connected with it, and upon their temperate representations at all times, or, if I may use the word, their instruction of the public in matters that relate to us. There is one point to which, as there are so many superintendents present, I would take the liberty of alluding. I have often alluded to it before as the great want of our profession, and a great impediment to any progress in it; and that is, a want of schools for clinical instruction in the nature and treatment of mental maladies. Until you have those schools, you will never be able to command men to take positions of great importance—not such as you would sometimes wish could be found. Nor will you give to the study of mental disorders its proper value till you place it in that rank which it ought to take among other departments of medical science. At present it has no place whatever. It is recognised in none of the schools, it is scarcely taught in any of the schools. That is one great and general disadvantage we labour under. I hope, gentlemen, that proper attention will be given to this and other subjects, and among the rest to a much larger intercourse with our foreign brethren, a more intimate knowledge of what is doing by the great minds that are scattered over the different countries of Europe as well as our own, so that we shall have a more general comparison, as it were, of ideas between them, and that many points that are subjects of dispute and prejudice, will be more clearly understood. These and many other important points which I shall not take the liberty of mentioning to you at present, seem to me materially connected with the conduct of our Journal. I think whoever is editor, the Journal must always be considered as the organ of this Association, and I am most anxious that it should be so conducted as to fulfil all these conditions. I therefore do hope that if there is any little feeling of the kind, it will be allowed to subside, and that, at all events for the present, we should concur in the resolution which has been proposed to you.

The President: It remains for me to put the resolution proposed by Dr. Thurnam, seconded by Dr. Campbell, “That Dr. Lockhart Robertson be elected editor of the Journal until the next Annual Meeting.”

The resolution was put, and carried *nem. con.*

Dr. Robertson: Mr. President and gentlemen, I shall willingly

Any person receiving any per-centage on or otherwise interested in the payments for patients.

The medical attendant, as defined in the Lunacy Act, chapter 100.

[c. 96, s. 12. c. 97, s. 76.]

Sec. 26.—Where a patient received as a pauper is made a private patient, no fresh order or certificate is required, and *vice versâ*.

N.B.—*Notice of any transfer under this section should be given to the Commissioners.*

Sec. 28.—With the exception of the statement by the medical officer as to a patient's mental and bodily condition, all the documents heretofore required to be sent to the Commissioners after two and before seven clear days from the reception of the patient, must in future be sent within one clear day from such reception. The medical officer's statement is, as heretofore, not to be sent until after two and before seven clear days.

[c. 100, ss. 52 and 90. c. 97, s. 89.]

Sec. 40.—Without special directions to the contrary, letters addressed to the Commissioners, Committees of Visitors, Committees of a Hospital, and the Visitors of Licensed Houses, must be forwarded unopened.

Other letters must also be forwarded unless, by an endorsement thereon, the superintendent or other person having charge of patients should prohibit their transmission.

Letters so endorsed to be laid before Commissioners, Committees, or Visitors at next visit.

Sec. 38.—Absence on trial may be permitted to patients in the same way as leave of absence for the benefit of health is permitted under the 86th section, chap. 100.

Sec. 43.—In the absence of any person qualified to discharge under ss. 72, 73, chap. 100, a discharge or removal may be ordered by the Commissioners.

Pauper Patients.

Sec. 25.—The order must contain the name and address of one or more relations of the lunatic, and notice of the death of the lunatic must sent to such relation.

[c. 96, s. 7. c. 97, ss. 67, 68, and 73.]

Sec. 26.—Where a person received as a private patient is retained as a pauper, no fresh order or certificate is required, and *vice versâ*.

N.B.—*Notice of any transfer under this section should be given to the Commissioners.*

Sec. 38.—A pauper permitted to be absent on trial from a licensed house or hospital, may have such an allowance made to him by order of the Commissioners, Visitors, or Committee as would be charged for him were he in the house or hospital.

Licensed Houses and Hospitals.

Sec. 14, 15.—No fresh licence can be granted by Justices without inspection and report by Commissioners. Notice of alterations in houses licensed by Justices must be given to Commissioners. Their report upon the premises proposed to be licensed, and on any proposed alterations, must be submitted to the Justices and considered by them, before the licence is granted or the alterations are consented to.

Sec. 16.—The physician, surgeon, or apothecary, not being a licensee, where any such is by law required to reside in or visit a licensed house, must in the metropolitan district be approved of by the Commissioners, and in the provincial district by the Visiting Justices.

[c. 96, s. 2.]

Sec. 17.—A penalty is imposed on any person infringing the terms of his licence as to numbers, sex, or class.

Sec. 18.—With the consent of two of the Commissioners, or in the case of the provincial licensed houses of two of the Visitors, a person who may have been a patient within five years immediately preceding may be received as a boarder into a licensed house.

[Extension of c. 96, s. 6.]

Sec. 29.—Licensed houses *may* be visited at any time by one or more Commissioners or Visitors, but in the metropolitan district they *must* be so visited twice in the year in addition to the present visits by two Commissioners, and in the provincial districts similarly by Visitors. Commissioners and Visitors visiting singly have substantially the same powers of inspection and inquiry as when visiting together, but only the 63rd, 64th, 65th, 66th, and 67th sections of the old Act are applicable to the additional visits to be made by Visitors, to which the 62nd section of that Act does not apply.

[c. 100, s. 61.]

Sec. 39.—A penalty is now imposed on any officer or servant conniving at an escape.

Sec. 43.—In the absence of any person qualified under sec. 72, 73, chap. 100, the Commissioners may order the discharge or removal of a patient.

Sec. 35.—The inquiries now authorized to be made by Visiting Commissioners and Justices, will in future include inquiries as to monies paid to the superintendent or proprietor.

[c. 100, ss. 64 and 92.]

Sec. 36.—Copies of entries made by the Commissioners in all houses not in the metropolitan district must in future be sent to the clerk to the Visitors.

[c. 100, s. 67.]

Sec. 38.—Absence on trial may be permitted to patients in the same way as leave of absence for the benefit of health is permitted under the 86th section, chap. 100.

Medical Certificates.

Sec. 27.—Where medical certificates have been returned with a written direction of the Commissioners for amendments, and such amendments shall not have been made within 14 days, the Commissioners may order the patient's discharge.

[c. 96, s. 11. c. 97, s. 87.]

Sec. 22.—Lunatics so found by inquisition may be received without certificates on an order of the Committee, accompanied by an office copy of the order appointing such committee.

APPOINTMENTS.

DR. WM. WOOD, M.R.C.P., to be Visiting Physician to St. Luke's Hospital.

G. W. SAUNDERS, M.D. Lond., late Assistant Medical Officer to the Devon County Asylum, to be Medical Superintendent of the same Asylum.

The pressure on our pages caused by the report of the special meeting compels us to defer some papers and notices which were in type on the condition of the great Australian Asylum, Dr. Gairdner's excellent work on clinical medicine, &c.

accept the charge of the Journal, as you have proposed, until July. In doing so, however, you will perhaps allow me to slightly refer to some remarks which have been made. Neither the committee, nor Dr. Bucknill, nor myself, put me forward. On the contrary, I most carefully avoided putting myself forward. I intended leaving the question of editor entirely in the hands of this meeting; but it was in consequence of a printed circular sent round to every member that I was forced into action. In that circular one of the members offered himself as editor, and I felt that to remain longer silent would certainly be to forego my just claims upon the appointment. Therefore I wrote to several of my friends. I wrote first to Dr. Bucknill, then to Dr. Wood, Dr. Munro, Dr. Campbell, and Mr. Marshall; and I wrote to Dr. Thurnam and others, stating that I also was desirous to have my claims considered by this meeting. It was in consequence of the appeal that I made to Dr. Bucknill that he wrote this letter to the President. I should have been very unwilling to sit down, leaving the meeting under any false impression that Dr. Bucknill wished to dictate who should be his successor. I am sure that nothing could be farther from his mind. There were many letters exchanged between Dr. Bucknill, Dr. Kirkman, and myself. Our whole wish was to call a general meeting, so that the committee should not appear to interfere in the matter of the Journal. I resigned the secretaryship, because, considering myself a candidate, I thought it was fair that the Association should meet me as one of the members, and not as an office-bearer. I shall very willingly conduct the Journal until July, on the distinct and clear understanding that I have no more claim on the editorship in July than any other member of the Association. I am particularly fortunate in having received from Dr. Maudesley—a name that I am quite sure every gentleman who reads the Journal will appreciate—the promise of his co-operation during this period. The editorship shall remain open till July. I shall edit it, and I have the promise of Dr. Maudesley's assistance until then. I hope that Dr. Wood will so far approve of our efforts as to continue his support to us until that meeting. That, however, is a question for the future to determine. I beg to thank you for this, and for the many other acts of kindness I have always received from the Association.

Dr. Wood: Mr. President, I am sure that what Dr. Bucknill did, in recommending Dr. Robertson as his successor, he did in the interests of the Association; and the very straightforward and manly way in which Dr. Robertson has proposed to act, during the forthcoming nine months, quite removes any doubts in the minds of anybody as to his being the proper person to take charge of the Journal until that time.

The President: Gentlemen, Dr. Robertson's editorship of the

Journal entails another appointment which you must make to-day. You must have a Secretary.

Dr. Hitchman: Mr. President and gentlemen, I have very great pleasure in moving that Dr. Harrington Tuke be solicited to take the office of Secretary of this Association. He is a gentleman whose courtesy and ability are well known to us all. He has taken a most active and lively interest in the success and prosperity of this Association from the very earliest time of its establishment; and I am sure his appointment would be satisfactory to us all.

Dr. Manley: I have very great pleasure in seconding that resolution. It would be a graceful act to Dr. Tuke, as he lost the presidentship a short time ago.

The resolution was put, and carried unanimously.

Dr. Tuke: Mr. President and gentlemen, I very sincerely thank you for the honour you have done me. I would almost rather be secretary than president. I think the office of secretary is one in which a man may be of great use, who has at heart social intercourse and kind feeling between the members. I shall be very happy, as Secretary, to promote that in every possible way. I sincerely trust that as a society we shall all be bound together, and that we shall never on future occasions have amongst us any distinction between "public" or "private" asylums. I sincerely trust that that may be the case, and that when I meet you next year I may be re-elected Secretary.

Dr. Robertson: I believe, gentlemen, the only business remaining to do is to propose a vote of thanks to our Chairman. He has taken very great trouble about this meeting, and had a great deal of anxiety and thought about how we should conduct it. He has come a long journey to attend it; and I beg to propose a vote of thanks to him for his conduct in the chair.

Dr. Millar: I beg to second that proposal.

The motion was carried with acclamation.

The Lunacy Acts Amendment Act, 1862; Paper of Instructions by the Commissioners in Lunacy (September 1st, 1862).

Private Patients.

Sec. 23.—The order must be dated within one month prior to the reception; the person signing the order must himself have seen the patient within one month prior to its date; and a statement of the time and place when the patient was so seen, must be appended to the order. A form of order is subjoined.

[c. 96, s. 4. c. 97, s. 74.]

Sec. 25.—Where possible, every order must contain the name and address of one or more relations of the lunatic, to whom notice of the death of the lunatic must be sent.

Sec. 24.—Besides the persons hitherto prohibited from signing certificates and orders, the following also are now disqualified:

NOTE BY DR. ROBERTSON.

It is with no small diffidence that, in accordance with the unanimous vote of the Association, Dr. ROBERTSON now assumes the conduct of this Journal.

It will be his anxious endeavour, in the performance of the task now entrusted to him, to maintain the Journal in the position of honour which it has hitherto held, by following the example of independent, straightforward action set to him by his distinguished predecessor. He trusts that during his editorship the pages of the Journal will continue, as heretofore, unsullied by unseemly disputes and personal discussions unworthy of the members of a learned profession, against which Dr. BUCKNILL has firmly closed his pages. He deems it right to take this first opportunity of explicitly stating his rule of action on this important point, and no fear of offence to individual members of the Association will induce him to depart therefrom.

Nine years have elapsed since the first number of the Journal appeared; it may be not uninteresting on the present occasion to look back on the work which during these years this Journal has accomplished. The year 1852 found the Association few in numbers, of limited funds, and less influence. The Annual Meetings had almost fallen into abeyance, and the objects of the Association in the improvement of asylum management, the diffusion of the knowledge of the treatment of mental disease, and the promotion of free communication on these subjects between its members, were alike unfulfilled; the Association was but a dim name, and of its existence even many members of the department, including the present writer, were ignorant.

The 15th of November, 1853, the first number of the Asylum Journal appeared. Some of the readers of this

note will remember its unpretending bi-quarterly form. In October, 1855, it assumed its quarterly form, and in April, 1861, it was transferred from the provincial printer to an excellent London establishment. Forty-two numbers in all have been published. Dr. ROBERTSON ventures to say that the thought and tone of the articles contributed in this period have materially raised the position of the English psychological medicine both at home and abroad. The Journal now circulates in our most distant colonies, and it was only this summer that Dr. ROBERTSON learnt from a distinguished foreign visitor that no less than seven copies circulated in Sweden.

With the issue of the Journal the Association rose into new life. With one or two exceptions, whose absence Dr. ROBERTSON personally regrets, as that of men whose work he has learnt to know and value, all the medical officers of the public asylums in England, Ireland, or Scotland, have joined our ranks, which have had further added to them every physician of any character or pretensions engaged in the private practice of this department in medicine. Moreover, men of European fame, as Sir BENJAMIN BRODIE, Sir HENRY HOLLAND; of high official position, as Mr. GASKELL, Dr. NAIRNE, Mr. WILKES, Dr. BROWNE, Dr. COXE, Dr. NUGENT, &c., have willingly consented to enrol their names in the list of our honorary members. It is superfluous to point out the increased influence which such an extension of our members has given to the Association. —

The contents of the 'Journal of Mental Science' may be divided into—

- I. ORIGINAL CONTRIBUTIONS AND LECTURES.
- II. REVIEWS.
- III. ENGLISH AND FOREIGN QUARTERLY PSYCHOLOGICAL RETROSPECT.
- IV. CORRESPONDENCE AND NEWS.
- V. MEDICO-LEGAL CASES.

I. ORIGINAL CONTRIBUTIONS AND LECTURES.

Dr. ROBERTSON *knows how able the members of the Association are to supply such articles. Few pleasures in this vain world are more real than the satisfaction which flows from successful intellectual effort. It is, moreover, a duty which each owes to his calling, to make known, as widely as opportunity may offer, the results of his thought and labour. The French physicians herein set us an example which we would do well to imitate. Our asylum case-books, to quote Dr. CONOLLY'S emphatic words, contain treasures hitherto hidden.*

II. REVIEWS.

It will be the desire of the Editor, and of those associated with him in the conduct of the Journal, fairly and without favour to pass in review all recent works bearing on practical psychology and its kindred subjects.

III. ENGLISH AND FOREIGN QUARTERLY PSYCHOLOGICAL RETROSPECT.

In this section of the Journal will be given a quarterly summary of the progress of medical science at home and abroad in all that relates to subjects embraced in the 'Journal of Mental Science.' The Editor ventures to add that the experience which he acquired when associated with Dr. RANKING, as a writer in the 'Half-yearly Abstract of the Medical Sciences,' will enable him to conduct this important department of the Journal to the satisfaction of the Association.

IV. CORRESPONDENCE AND NEWS.

In the earlier numbers of the Journal some very interesting letters are to be found relating to everyday asylum life. "A class of articles (writes the Editor in the number for November, 1854), to which we attach much importance, and which we hope to see developed, is one for which it is difficult to find a name. We mean the multifarious little

matters of practical utility, ranging from pins and needles upwards—the utilitaria by which the ship is kept neat and cleanly or comfortable. Little matters, but of great importance to the well-being and economy of a large institution, and not unfrequently also to the health and the safety of the patients.”

V. MEDICO-LEGAL CASES.

The increasing attention which the public press as well as the medical and legal professions pay to trials in lunacy, renders it desirable that a record of these cases be preserved in the pages of the ‘Journal of Mental Science.’ The Editor has promises of help in this section of his work, such as will enable him fairly to deal with this difficult department of medical jurisprudence.

In thus surveying the work before him, Dr. ROBERTSON candidly admits that he feels unequal, single-handed, to undertake it. It is only the promised aid and co-operation of so competent a writer as Dr. HENRY MAUDSLEY that now emboldens him to embark on his editorial duties. It was a matter of much regret to Dr. ROBERTSON’S supporters, as well as to himself, that the rules of the Association prevented the election, at the late Special Meeting, of more than one Editor, and that consequently they were prevented from formally associating Dr. MAUDSLEY’S name with Dr. ROBERTSON, as joint Editor of the Journal. Moreover, Dr. ROBERTSON was overruled by a special vote at the conclusion of the meeting in his wish to leave the public announcement of the names of the conductors of the Journal open till the next Annual Meeting. Under these circumstances he adopted the only course left open to him, of giving the notice to the Secretary, required by Rule 18, of his intention, at the Annual Meeting of 1863, to move that Dr. MAUDSLEY be associated with him (in the event of his re-election) as joint Editor of the Journal, as until that date he will be in its management.

September 18th, 1862.

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*No. 45 (new series, No. 9), will be published on the
1st of April, 1863.*

"In adopting our title of the 'Journal of Mental Science, published by authority of The Association of Medical Officers of Asylums and Hospitals for the Insane,' we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the terms, mental physiology, or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid, for although we do not eschew metaphysical discussion, the aim of this Journal is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health or to produce mental disease, are not less questions of mental science in its practical, that is, in its sociological, point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say, that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains, immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our Journal is not inaptly called the 'Journal of Mental Science,' although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science, with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."

J. C. BUCKNILL.

THE JOURNAL OF MENTAL SCIENCE.

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JANUARY, 1863.

VOL. VIII.

PART I.—ORIGINAL ARTICLES.

On the want of a Middle Class Asylum in Sussex, with Suggestions how it may be established. By C. L. ROBERTSON, M.B. Cantab.

(Read before the Brighton and Sussex Medico-Chirurgical Society,
December 4, 1862.)

"I must own, that the more I reflect on the subject [public asylums for the middle classes], the more it grows upon me, and the more am I inclined to wonder that this idea, which has been contemplated so long by great and good men, has not been embodied into a reality. Should it ever exist, and should good results spring from it, it will only be another instance of how continually we are on the verge of finding a treasure, and pass it by unconsciously."—*Public Asylums for the Middle Classes*," by Henry Monro, M.B. Oxon, 'Journal of Psychological Medicine,' October, 1851.

THE subject which I am permitted to-night to bring before this Society is one I have long had at heart, and one which the daily experience of my practice at Hayward's Heath prevents my passing by merely on account of the difficulties which evidently attend the realisation of my hopes, should such an issue be granted to them. I refer to the want in our county of an asylum for the care and treatment of the insane of the middle class—a class with which, while separated by education and calling, we, in our profession, are, on the other hand, too often linked by the common bond of narrow means and pressing daily cares.

Hardly a week passes over without bringing me letters from the medical attendants of patients of the middle class, or from their relatives, asking if they can be admitted at Hayward's Heath as private patients; and if not, what steps I can advise to meet their urgent requirement of good asylum accommodation, at such cost as their limited means will permit them to defray. My reply is a statement of the painful truth that I cannot help them, and it is thus week by week pressed home to me that I must not allow so grave a social

want to continue unredressed in my daily path without making an effort to supply the same.

And in looking around to see whence help was herein to come to those thus afflicted, and whom I am obliged to leave unaided in their distress, I have felt that to none should I with more hope of help bring my case than to my professional brethren in the county, and more especially to you practising in this influential and wealthy town of Brighton. With this view I spoke to your late President, Mr. Hollis, who, from his official position at Hayward's Heath, is familiar with the want of which I am speaking, and he kindly arranged that this evening should be given up by the Brighton and Sussex Medico-Chirurgical Society to the discussion of the want of an asylum in Sussex for the middle class, and of the means by which, perchance, it may be provided.

You all know how liberally the county of Sussex and this town of Brighton have provided at Hayward's Heath for the care and treatment of their insane poor. Were I myself, in the wise providence of the Most High, afflicted with so terrible a trial as mental disease, I should desire no better home than that Asylum affords. A wise liberality has there provided all that science has hitherto devised as tending to the cure of insanity and of the relief of its sufferings.

When, in 1859, the asylum there was opened, the Visitors, acting on my advice, determined to admit patients of the middle class to the benefits of the asylum on a weekly payment of 16s., the Lunacy Act permitting such an arrangement so long as spare beds are in the asylum, not required by the pauper patients of the county. This permission is, however, granted only, and most wisely, on the further condition that they be treated exactly as the parish paupers, and this in order that in such a hospital for the cure of mental disease the classification and other elements of moral treatment continue to be based solely on the mental condition of the patients, and remain uninfluenced by social restrictions.

When I so advised the Visitors, I was fully aware of the trouble which this restriction would bring to me from the complaints and dissatisfaction of the friends of private patients, nor was I deceived in my reckoning. Rather the contrary. Indeed, it was matter of much personal comfort to me when, in the spring of this year, the crowded condition of the wards obliged the Visitors to close the doors against the admission of private patients, and to require the removal of those already there.

I can hardly spare time, and perhaps it is as well unsaid, to tell you of the practical difficulties, not to speak of the personal worry, attending the mixing in one house and under one system of treatment of pauper and private lunatics. Dr. Campbell records a similar experience when the trial was made in the early history of the Essex Asylum. "The admission," says the visitors in their report of 1860,

"of private patients into the Essex Asylum was inconvenient and inconsistent with the quiet and the good management of the great body of pauper lunatics."

As, however, the asylum at Hayward's Heath is closed against the admission of private patients of the middle class, and as there is, from the increasing demand on the part of the unions, for beds there, no prospect of its ever again being opened for their reception, we may here dismiss the further consideration of the county asylum as a place for the treatment of the insane of the middle class in Sussex and Brighton.

Lord Shaftesbury, in his evidence before the select committee of 1859, and which I shall have occasion again to quote, recognises the evil of this mixing of private and pauper patients in county asylums. "The receiving of private patients in some of the county asylums is," he says, "a very bad thing; it is not right, for they are classed with the paupers. And yet," he justly adds, "to recognise a distinction would be the very worst thing that could be done. There we have found that the combination of differing classes has always been the cause of the greatest jealousy; the paupers have thought that they were pushed into nooks and corners, and that their interests were made subservient to the interests of others."

So likewise Dr. Bucknill, in his evidence before the same committee, condemns the mixing in the same asylum of pauper and private patients, and refers to the experience at Gloucester, where the two classes have been separated, and a middle class asylum for the county instituted.

The daily want felt in Sussex of a house for the care and treatment of the insane of the middle class is one which thus has been felt, and which has engaged much attention in different parts of England. In 1857 the Earl of Shaftesbury, the chairman of the Lunacy Board, made, in a published letter, the following observations on this subject:

"It is of real importance to the happiness and comfort of persons and families in a superior condition of life, but with small fortunes, that they should have the means, in case of mental visitation, to obtain for themselves or their relatives the best treatment at a moderate cost."

"Nothing worthy of the name of treatment or accommodation can now be obtained, except at a cost which is ruinous to clerks, tradespeople, and hard labourers in various professions."

"The misery that follows inflictions of this kind in families such as I have mentioned is indescribable."

In 1851 Dr. Henry Monro published, in Dr. Forbes Winslow's 'Journal,' a paper on "Public Asylums for the Middle Classes," in which a strong sense of the same want is expressed. "What," he says, "can the father of a family, the possessor of an income ave-

raging £150 or £200 do when one son out of five becomes insane? or what can the children do for that father? What can the clergyman, the medical man, the man of small business—I may say the great majority of the middle classes—do? For the wealthy all conveniences are open, whether private asylums, lodgings with medical men, or their own houses, and it is the fault of their friends more than their circumstances if all is not done for them which can be done. For the poor or labouring classes the county lunatic asylum, the hospitals of Bethlehem and St. Luke's, afford great and suitable accommodation. But what is there for persons of habits as refined as their richer neighbours, and education often superior? They cannot afford the former alternative, and are too often compelled to accept the latter, and this at a cost which none but those who witness their sufferings can at all appreciate."

Mr. Gaskell, one of the Commissioners in Lunacy, whose knowledge (to quote Dr. Bucknill's words) on the whole subject of lunacy is unsurpassed, in a paper which he contributed to the 'Journal of Mental Science' for April, 1860, bears similar testimony to the urgent want of asylum accommodation for the insane of the middle class. "For the pauper," he says, "attacked by insanity, asylums are required by law to be opened in every district, and on behalf of this class little further is needed, except a more satisfactory recognition of the intention of the legislature, the abolition of certain restrictions attributable to an incomplete abandonment of obsolete views and practices. But for those not included in the list of paupers there is a lamentable want of proper means of treatment and care in this portion of the United Kingdom. Benevolent individuals have, indeed, from time to time endeavoured to supply the deficiency; nevertheless, the few charitable institutions scattered over the country are quite inadequate, the amount of hospital accommodation for mental affections being far below the demands made for accommodation and relief, presenting, as it does, a striking contrast to the abundant provisions made for bodily ailments in every district.

"The question naturally arises, how are the unfortunate individuals who belong to the labouring and middle classes accommodated and treated? It is too notorious that many are detained at home, causing sad disasters, confirmation of the malady, and reduction of the family to pauperism by the expense incurred; others, again, are sent to private asylums, where, the cost of maintenance being necessarily great, a like pauperising result ensues, and in numerous instances admission is obtained into the county asylum, which, being strictly instituted for the reception of paupers, involves an evasion or infraction of the law."

Again, Dr. Maudsley, in a paper in the current number of the

'Journal of Mental Science,' "On Middle Class Asylums," makes the following observation :

"It seems to admit of no question, amongst those who have a knowledge of the matter, that some provision is yet needed for those insane who are poor, but not poor enough to be paupers. Many cannot pretend to pay what would be necessary for their admission into a private asylum; and others, who by the utmost shifts contrive to do so, do it at a sacrifice which cannot be justified, save by its necessity. In the latter case it often happens that those who are growing, and have to take their places in life, are deprived of important advantages for the sake of one who is, perhaps, for ever dead to the world. Now, it is plainly bad philosophy to expend power on a dead past and to starve the future of power, and, therefore, bad policy on the part of society to put any man in the position of being obliged to do it.

"The resource which is afforded by the few county asylums which do admit these unfortunately placed insane, on payment of the usual charge for maintenance, is but a partial, uncertain, and ineffectual remedy; nor is it by any means certain that even when there is room in the county asylum it is advisable to admit private patients. Passing by other grounds of objection which might well be urged against such a course, it may be maintained, on just principles of treatment, no less than on amiable grounds of benevolence, that it is not well to place any one who has become insane in very different social conditions from those of his or her former life. If it be most dangerous, as it certainly is, to the mental health of a sane person to be placed in entirely changed external conditions, without his inner life having been gradually adapted thereto, how much greater must the danger be to the unsound mind which has lost that very controlling force of reason whereby it might adapt itself to the unwelcome change. To demand such an adaptation from the diseased mind is to put a strain on the cracked links of reason which they will scarce bear when quite sound. And that is really to begin treatment on the homœopathic principle of doing that which would be most likely to produce the disease in a sound person. County asylums have been built with a certain design, and the accomplishment of that design must be their duty. However valuable, then, their assistance may be as a temporary expedient, they cannot be considered as affording a permanent provision for the poor insane who are not paupers."

In a paper read before the Association for the Promotion of Social Science in 1859, my revered friend, Dr. Conolly, makes the following remark on the difficulties in which persons of the middle class afflicted with mental disease are, from the want of asylums suited to their means and requirements, now placed:

"Their situation," he there says, "if their resources are very

limited, is indeed pitiable. The public asylums (of England), with a few happy exceptions (Bethlehem Hospital, St. Luke's, the Hospital for the Insane near Northampton, and the Coton Hill Asylum, near Stafford), and the private asylums where the terms are not more than can be afforded, do not offer the advantages enjoyed in the county asylums by the more fortunate pauper. *Institutions adapted to the insane of the poorer of the middle and educated classes are yet unhappily wanted.*" And repeatedly, in conversation with me, has Dr. Conolly lamented this great want in the provision in England for the care of those mentally afflicted. I say in England, for in Scotland the want is not felt, owing to the admirable provision made for this class of patients in the seven chartered asylums built by private benevolence, and since their erection self-supporting.

In 1859 the Earl of Shaftesbury, in his evidence before a select committee of the House of Commons, points to these chartered asylums of Scotland as the type on which provision for the insane of the middle class in England should be formed. "I now speak," he says, "with reference to that large class of society which begins just above pauperism, and goes on to the highest in the land. All the difficulties in legislation arise out of that particular class. . . . If you had establishments of that kind, asylums or public hospitals, I should like to say chartered asylums, you would find that they would be precisely the reverse of those I have mentioned. First of all, there would be a total absence of that motive which constitutes the vicious principle of the present licensed houses, there would be no desire or view to profit of any sort.

I have no doubt that a certain number of those licensed houses would continue, and I dare say that persons, from peculiar notions of their own, would resort to such asylums. I would allow them to continue, and I would also have, as you have public asylums for paupers, houses on a public footing for persons in a better condition of life.

"The example which I principally should follow would be the example of Scotland. In Scotland the chartered asylums have existed for a certain number of years, and they have been productive of the very greatest benefit. We have a certain number of institutions similar to them in England, and they are called hospitals. Hospitals in England are founded upon private funds. The chartered asylums in Scotland are also founded upon private funds."

Eleven such institutions already exist, affording accommodation to about 500 persons of the middle class. Some, like the Friends' Retreat near York—and a blessed, calm retreat for the weary and troubled in mind it has indeed proved—have now been in operation for many years.

In the ninth report of the Commissioners in Lunacy (1855) will

be found in Appendix B a detailed history of these middle class asylums, some of which are in possession of considerable funded property. The following is a list of these hospitals, with the mean population (average number of patients resident) during the year 1861 :

Name of Middle Class Asylum.	Year in which founded.	Mean population, 1861.
1. St. Thomas's, Exeter	1801	59
2. Barnwood House, Gloucester	1860	15
3. Liverpool Lunatic Hospital	1792	55
4. Cheadle, near Manchester	1849	79
5. Lincoln Lunatic Hospital	1820	75
6. Northampton "	1838	96
7. The Coppice, Nottingham	1859	45
8. Warneford Asylum, Oxford	1826	56
9. Coton Hill, Stafford	1854	122
10. York Lunatic Hospital	1777	146
11. Friends' Retreat, York	1796	122

These middle class asylums are all situated far away from Sussex ; indeed, there is not one in the home counties. The wants of the most populous part of England for middle class asylum accommodation have yet to be met.

The expense of erection of these eleven middle class asylums has, in most instances, been the result of long years' accumulation of funds the gift of private benevolence. It must, however, be borne in mind that these offerings were made previous to the Lunatic Asylum Act, which compelled counties to erect asylums for the care of their pauper patients, and that appeals to the benevolent for such funds were responded to before ratepayers became practically acquainted with the lunatic asylum rate, which now permanently figures as an additional charge of the county rate.

I have thought long and carefully over this question, and I have endeavoured to view it in its several bearings. While daily more convinced of the urgent want of a middle class asylum for Sussex—an opinion shared, I know, by several of the visiting justices of the county asylum at Hayward's Heath—I have also arrived at the conclusion that it would be fruitless to endeavour to raise the necessary sum (£20,000) by any appeal to the charity of the county. That charity has already, as regards the insane, been wisely and liberally exercised in the construction of the county lunatic asylum ; and in my opinion, no further claim could herein be with justice raised.

"The voluntary principle," said Lord Shaftesbury in 1859, "has its limits, and I think that the voluntary principle on this head has reached its utmost limits in England. It has founded eleven hospitals that have worked well, but the voluntary principle has not gone any further, and I do not think it is likely that any more will

be founded. I believe you will get nothing done by relying any more upon the voluntary principle. . . .

“In the year 1845, when there was great sympathy excited with respect to lunacy, we held a large public meeting, and we got all the best names in the medical profession to assist us. We had a long debate, and the greatest sympathy was expressed; there was not a human being who did not admit that it was a crying evil, and I never received more expressions of congratulation in all my life, but I was obliged at last to say that a little less praise and a little more support would have been more acceptable, for, notwithstanding all the sympathy that was expressed, the voluntary principle was so dead that we only succeeded, after a great deal of trouble and anxiety, in raising £1200. That £1200 we kept for a long time, hoping that it would increase, but nobody seemed inclined to assist us, and we were obliged, after two or three years, to give it back to the subscribers, a break at the whole thing.”

Moreover, the middle class of England neither require nor desire alms. What they want in this and many other similar instances is organized co-operation. The law of the land has already supplied the insane poor of Sussex liberally and amply with all that they require; the law of demand and supply has furnished the insane of Sussex of the wealthier class with an asylum unequalled in the land for the quiet, comfort, privacy, and luxury, which it offers. But the ready supply of its every want which wealth always has commanded comes more coyly to those of humbler estate. It is only in our own day that the many are learning the power of numbers and co-operation to supply the advantages of wealth. Our fathers could not dine as we do at our clubs, with all the luxury and state of a peer, for half-a-crown, and this not from any charitable contributions of the wealthy to increase our comforts, but simply by the power of co-operation. The history of the model lodging-houses is a similar illustration. I believe that herein will be found the means of supplying the want, which we all acknowledge, of a middle class asylum for the county of Sussex.

Lord Shaftesbury, in his evidence before the select committee to which I have already referred, thus states the remedy which he recommends for these evils, viz., *legal encouragement for the endowment of hospitals for lunatics*. These hospitals “to be founded in two ways, either, as in Scotland and in some parts of England, by private contributions—and we have eleven hospitals in England also so founded—or, as in England, in respect to borough and county asylums, upon the public rates. . . . I would give in the bill a permissive clause to counties for the purpose of founding these asylums entirely for the reception of the middle class patients. . . . It would not require that the county should do more than give the guarantee of its rates; it would not be necessary that

the county should expend a farthing ; in fact, it would incur no hazard of its own whatever. But then it should have power to erect an asylum of that description ; I would leave the governing power, the initiating power, just the same as with regard to the county asylums, with the magistrates in quarter sessions, or it might be vested in the visiting justices of the present county asylums, who, having considered all matters, might, with the consent of the magistrates in quarter sessions, if they thought it desirable to institute such an asylum, merely take the guarantee of the rates to raise the sum of money at $6\frac{1}{2}$ per cent., the whole interest and principal being thus paid off in thirty years. The thing would be self-supporting, and the moment the asylum was opened it would be filled with patients, some of a higher class and some of an inferior class, who would pay the whole expense ; their payments would cover not only the $6\frac{1}{2}$ per cent., but the whole expense of carrying on the institution, the care and maintenance of the inmates, and all the salaries and everything else."

Every word of this I believe would have come true ; and had such powers been given in this county to the justices, I feel certain that a well-ordered middle class asylum might be erected, which would return 10 per cent. on the capital invested, and so, after the repayment of the loan, form a fund for the reduction of the rate of charge in deserving cases.

Unfortunately this wise suggestion has not been adopted in subsequent lunacy legislation, although similar permissive powers have, without entailing any loss on the ratepayer, erected in London, and many of our large towns, baths and wash-houses of which rich and poor alike reap the benefit. Through the guarantee of the rates of the London parish in which I formerly resided (St. George's, Hanover Square), I had, without any loss to the ratepayers, and at a remunerative price to the undertaking, a morning plunge-bath for 4*d.* or 6*d.*, and a tepid swimming bath better than Brills' for 6*d.*, while as yet private enterprise alone leaves the cost of a cold bath in Brighton at 2*s.* and a swimming bath at 1*s.* 6*d.* If I mistake not, I paid 3*s.* at the Bedford Hotel for a tepid bath in no way better than I got for 6*d.* at the St. George's Baths and Wash-houses.

Had the application of this principle of the permissive guarantee of the rates, at the discretion of the justices, for the erection of middle class asylums, been sanctioned by the legislature as Lord Shaftesbury desired, the want which we all feel of an asylum in Sussex to which to send our patients, who neither require the luxury nor are able to meet the cost at Ticehurst, would already have been provided, and would in thirty years have repaid interest and capital, leaving subsequent profits to form a fund for the reduction of the cost of maintenance in individual cases requiring such aid. Failing such legislative aid, the obligation to help ourselves becomes the greater.

The success of recent joint-stock hotels, under the security of the Limited Liability Act, points the way to the solving of the question of how an asylum for the middle class in Sussex may best be provided.

The effort of getting such an undertaking afloat, if only heartily taken up by the members of this Society whom I have now the honour to address, would not be great, while the benefit it would confer on their patients, if afflicted with mental disease, and hence on the whole community, would be incalculable.

At present, except in the case of a rich man who can afford his two to three hundred a year for care and treatment at Ticehurst, there is no place in the county where an insane patient can be sent, an attendant procured in cases of emergency, or the wants of the profession in the treatment of mental disease in any way met. The consequence of this is, as I have before said, weekly appeals to me to admit private patients into the county asylum, and which I am obliged to refuse; and subsequent subterfuges between the patient's friends and the parochial authorities to evade the law, by certifying and sending as pauper patients to Hayward's Heath persons who are not paupers, and who, while repaying the parish the charge made there for their maintenance, would infinitely rather pay the cost of a middle class asylum, were such open to them. I am violating no official confidence—the question already having been before the late West Sussex Sessions—in referring to these subterfuges to evade the law, and to the practice of thus getting private patients admitted at Hayward's Heath. I may also say that the Visitors entertain a strong feeling of the legal obligation that rests on them to prevent the admission of such cases into a house built exclusively for parish paupers, and for the right use of which they are responsible to the ratepayers. I may, therefore, confidently state that the increasing demand for beds at Hayward's Heath made by the union authorities of the county will render it more and more difficult for patients of the middle class—wives of Brighton tradesmen and such like—to be, by a good-natured evasion of the law, admitted as patients there. And while, for the sake of those afflicted and of their sorrowing relatives, who know not where else to turn in their distress, I regret this state of things, we must, powerless as we are to alter the existing law or to increase the responsibilities of the ratepayers, yet admit its force, its unanswerable force, as an argument for the necessity of that middle class asylum for Sussex whose establishment I am to-night here to advocate. If the Visitors enforce, as they are determined to do, the strict requirement of the statute—that each patient admitted at Hayward's Heath should *bonâ fide* be a pauper, maintained at the cost of the union sending him—then the facilities which, for the past three years, by the admission of private patients and of others surreptitiously added to the union lists, have come to an

end, and it is for the public, advised as they will herein be by the profession, to take steps for the establishment of a middle class asylum, of whose sheltering care no one can say how soon the object of his dearest love may not stand in need. Like pale death, and yet more to be feared in its visitation, mental disease—

“Æquo pulsat pede pauperum tabernas
Regumque turres.”

This question of a middle class asylum for the insane is really a personal matter, coming home to every household of the great middle class in the county, and needs not that I further weary you by urging its, alas ! too obvious necessity.

I would rather pass on to the second part of my subject—to a brief sketch of how and at what cost I would propose, in the establishment of the middle class asylum I am advocating, to supply this pressing social want.

1. I would suggest that the Sussex Middle Class Asylum begin with offering accommodation for 100 patients, fifty male and fifty female. It is much better in every way to begin with such arrangements as will at once place the institution on a self-supporting and profitable basis. Most probably, within twelve months of the opening of the asylum these 100 beds will be filled. It will then be an easy matter to extend the accommodation as the demand arises.

2. *Form of construction.*—It is beyond question, I think, that a house such as we propose should be devoid of all architectural pretensions whatever. There are, it is true, two or three architects in England who can build palaces where ornament and use meet, and where the stately structure is furnished well without and within.*

* *Architecture as distinguished from Building.*—“Architecture,” says Mr. Ruskin, “is the art which so disposes and adorns the edifices raised by man, for whatsoever uses, that the sight of them may contribute to his mental health, power, and pleasure. It is very necessary to distinguish carefully between architecture and building. To build—literally to confirm—is, by common understanding, to put together and adjust the several pieces of any edifice or receptacle of considerable size. Thus, we have church-building, house-building, ship-building, and coach-building. That one edifice stands, another floats, and another is suspended on iron springs, makes no difference in the nature of the art, if so it may be called, of building or edification. The persons who profess this art are severally builders, ecclesiastical, naval, or of whatever other name their work may justify; but building does not become architecture merely by the stability of what it erects, and it is no more architecture which raises a church, or which fits it to receive and contain with comfort a required number of persons occupied in certain religious offices, than it is architecture which makes a carriage commodious or a ship swift.

Let us, therefore, at once confine the name (of architecture) to that art which, taking up and admitting as conditions of its working the necessities and common use of the building, impresses on its form certain characters, venerable or beautiful, but otherwise unnecessary. Thus, I suppose, no one would call the laws architectural, which determine the height of a breastwork or the position of a bastion. But if to the stone facing of that bastion be added an unnecessary feature, as a cable moulding, *that* is architecture. It would be similarly unreasonable to call battlements or machicolations architectural features, so long as they consist only of an advanced

Such men, however, do not in our day build our lunatic asylums or other Houses of Mercy. These are too often, I might say always, built by second-class architects, who may be at once recognised by their unanimous sacrifice of comfort and use to debased external ornament. We need not travel twenty miles from Brighton to view an imposing illustration of such architectural skill (so called). County gaols built in miserable imitation of a baronial keep, the handiwork of these second-rate artists, are also to be found in every county town.

I disclaim the wish to have the Sussex Middle Class Asylum built by such architects as these. The cost is, moreover, beyond the subject, and would, indeed, be misplaced. Such a house of refuge from sorrow and disease cannot be too quiet and unpretending in its externals. A staring structure of gaudy pseudo-Gothic or Lombardo-Venetian is a painful burlesque on the pain and suffering within its walls, and on the care fretting those whom business brings to its gates.

The old skill that built our colleges at Oxford and Cambridge, and such hospitals as St. Cross at Winchester and other of our ancient almshouses, has fled the land. We can afford no experimental trials at its recall, and must therefore content ourselves, and shall best do so, with a plain, square, three-story building, devoid of all architecture, and built of the bricks made in the locality. I think the quiet effect of the Friends' Retreat at York, thus simply built and adapted to its required use, decides, for our purpose, the question of any attempt at modern architecture in our building.

Next, as to arrangement. The block system offers for such an asylum the greatest facility, both of management and subsequent extension. Thus, in the first instance, one central block, containing the kitchen, general mess-room, offices, stores, &c., of a size sufficient to meet the

gallery, supported on projecting masses, with open intervals beneath for offence. But if these projecting masses be carved beneath into rounded courses, which are useless, and if the headings of the intervals be arched and trefoiled, which is useless, *that* is architecture. It may not be always easy to draw the line so sharply and simply, because there are few buildings which have not some pretence or colour of being architectural; neither can there be any architecture which is not based on good building; but it is perfectly easy and very necessary to keep the ideas distinct, and to understand fully that architecture concerns itself only with those characters of an edifice which are above and beyond its common use."—*The Seven Lamps of Architecture*.

My meaning thus is to BUILD the Sussex Middle Class Asylum, but not to try any ARCHITECTURE on it, and this for the simple reason that, in the present transition stage of English art, there are few men who deserve the name of architect, and that, moreover, these few are so engaged on buildings, public and private, that they do not undertake to build lunatic asylums. And as for the men who do so, I repeat that I personally would prefer the workmanship of the village builder, in its native absence of beauty, to their pretentious designs—designs which, contrary to all true art, sacrifice internal comfort and use to debased attempts at external effect. I could unfortunately write pages in practical illustration of this assertion.

ultimate requirements of the asylum is a work once done and requiring no further enlargement or expenditure. Then a second block with day and sleeping accommodation for the fifty male patients, and a third for that of the fifty female make the necessary beginning of the asylum. A detached laundry follows, and to which a general bath-house would be attached. Should subsequent experience, as I believe it will, render it desirable to extend the accommodation, the cottage asylum system, now so much debated, is exactly the means at our hand for doing so. A few simple cottages for two or three patients, built on the grounds, yet drawing their supplies from the central stores, is a suitable and economical means of extending both our accommodation and classification.

Of the central block, I need say little. Kitchens, dining-rooms, stores, and offices, are much alike everywhere. Only a word as to the general mess-room. I would have all the patients and officers of the house to take their meals there. The separation of sitting-rooms and the solitary meals, too common in private asylums, urged as this plan is by the unwise kindness of friends, are serious impediments to the cure of mental disease, and too often lead to depraved habits and practices. The society of other patients is an important element in the curative process, paradoxical though it may appear. The patient who has the least chance of recovery is the one for whom the expensive private lodging, under the auspices of some London physician of high fame, away from all sympathy and social relations, is hired by his ill-advised friends.*

Except in cases of illness, I would have all the meals of the establishment—not of course at the same hours—both prepared and served in this central block.

In the detached blocks for male and female patients I would observe the same simple style of building and arrangement. I propose that the patients of each sex be divided into two classes, the first consisting of twenty patients, and the second of thirty patients, at a charge, the first of £2 2s. and the second of £1 1s. a week.

The ground floor of the block on each side would thus be devoted to the second class, the first floor to the first class, while the third story would afford the additional sleeping-rooms required. The furniture and fittings in the second class I would have as simple as those at Hayward's Heath. In the first class, additional furniture and ornament would be introduced, so as to assimilate the apartments to those of a private family. Each floor would also have a bath-room,

* Lord Shaftesbury, in his evidence before the select committee (1859), which I have already had occasion to quote, says, "In a vast proportion of cases, I should say, in every possible respect, both with a hope of cure and with a view to the security and comfort and general happiness and enjoyment of existence, that the best way is to send the patient to some good private asylum; because we find now, and all our experience goes to show, that *association is one of the best means of curing lunacy; a well-managed association is one of the best modes possible.*"

water-closet, scullery, and attendants' room. The day-rooms in the male block would include a library, billiard-room, and smoking-room on each floor (fitted according to the class of patients), and in the female block a sitting-room, music-room, and needle-room, would occupy the same space. There would thus on each side be three day-rooms for the twenty first-class patients, giving thus as much privacy as one gets in a large country house. The thirty second-class patients would in the same space have ample room for the necessary classification and employment. There would also on each first and second floor be a six-bedded dormitory for the infirm and sick, with an attendants' room adjoining.

The third story in both blocks would consist of associated dormitories, with three and six beds each, and single rooms. These dormitories I would fit and furnish in the most simple way. Cleanliness and quiet would be my chief study. The attendants would sleep in the dormitories.

3. *Cost of fabric.*—I have spoken with our excellent county surveyor, Mr. Card, of Lewes, of this plan, and I am satisfied that such a series of block buildings for 100 patients as I now sketch could be built for £75 per head, while another £75 would furnish all the necessary fittings and furniture. I am willing to pledge my professional reputation on the building and furnishing, to the entire approval of the Commissioners in Lunacy, such an asylum for 100 patients at £150 per head = £15,000, this sum to include an ample margin for the laundry and bath-room and all the necessary domestic offices.

4. *Site.*—Then as to the site. Of course such a house ought to be in the country. About twenty to thirty acres of land to be laid out in grass and shrubberies, and flower and kitchen garden would be desirable. The purchase of this may be put at £70 an acre, the price we paid at Hayward's Heath. I would not, however, think it wise at once to purchase the land; a lease of twenty-one years, with power to purchase during the period, would be a better arrangement. I have a dream that, if such a site could be got near the county asylum, an arrangement to the advantage of both parties, in the supply of water and gas, and in the work of the land and of the laundry, and of the produce of the county asylum workshops, might readily be made—an arrangement which would reduce the preliminary outlay on the building by the cost of a well and engine and laundry, and the subsequent working expenses by the supply of water, of gas, of laundry and farm labour and artisan's work, at a moderate price, and at the same time benefit the county asylum by extending the means of employment for the patients there, and lessening the cost of water and gas, &c., by this increased consumption. The Artesian well at Hayward's Heath is equal to the supply of all Brighton, not to mention a small middle class asylum.

Such an arrangement would reduce the total working expenses of the new asylum by twenty per cent. at least, and yield also a profit to the county of the same amount.

5. *Total cost.*—Placing, then, the cost of the asylum building and fitting at £15,000, and of the land, if purchased, at £1500, and the preliminary expenses at other £1500, a sum of £18,000 would be required to fit the house for the reception of 100 patients. In addition to this, other £2000 would probably be necessary to meet the preliminary expenses of the first year, as, of course, a staff of officers and servants must be engaged to meet the first patient, and a few months would elapse before the house begins to fill. This gives a total of £20,000 as the first instalment of capital required to open such a middle class asylum as I have now sketched.

6. *Average weekly cost of maintenance.*—The charge for board, lodging, and medical care, I have proposed to fix at the relative rates of £1 1s. and £2 2s. per week; this charge to include all extras except clothing, which the friends of private patients usually prefer finding themselves. I calculate that the expenditure on such an establishment would average 24s. per week per patient, including repairs and wear and tear, and would thus leave a certain profit of 5s. a week per patient, making every allowance for the necessary repairs and refurnishing. I make this calculation, not on any theories of my own of the necessary expenditure, but on the authority of Dr. Maudsley, late medical superintendent of the Manchester middle class asylum at Cheadle, who, in a paper to which reference has already been made, in the 'Journal of Mental Science' for the current quarter (October, 1862), enters very fully into the financial arrangements of the existing middle class asylums the list of which I have already given. The average weekly cost (he says) of each patient for the year 1860 was, exclusive of repairs or rent—

	£	s.	d.	Average number resident.
At Coton Hill (Stafford)	1	1	10½	105
Nottingham	1	4	11	38
Manchester	1	0	10	74
Warneford (Oxford)	0	19	1¾	56
Retreat (York)	0	18	9½	116

So that the average maintenance cost of five public hospitals (middle class asylums) is £1 1s. 1d. weekly for each patient. These figures are from the report of the commissioners, notwithstanding which we must not put too great faith in them. We know that there are certain doubtful expenses which may be put under the account for maintenance or the account for repairs, and the most satisfactory plan would be to call for the total expenditure during the year, and to estimate the average weekly cost upon that. *In the Manchester Hospital the total, and, therefore real, weekly cost of each patient for*

that year was £1 5s. It is true that there were extraordinary expenses that year, and the average total weekly cost was £1 4s. for ordinary years.

I accept Dr. Maudsley's figures, and estimate the cost per patient in the Sussex Middle Class Asylum at 24s. per week, although, according to my views of the requirements of such patients, I do not think that the cost ought to be so high, and that the total expenditure per week might be reduced in time to £1 1s. a head. However, it is better to have too high an estimate than the contrary, and I am content to form my calculations on Dr. Maudsley's figures.

A calculation made on this wide margin leaves for a dividend £25 a week, or £1300 a year, or 6·5 per cent. on the total capital of £20,000. Moreover it is self evident that this dividend would, by a further increase of numbers, soon most legitimately be raised. And to show you that this is no visionary scheme, allow me to quote from Dr. Maudsley's paper the following facts :

"In the year from July, 1858, to July, 1859, the income of the Manchester Middle Class Asylum of which I was superintendent, was £4652 15s. 5d., and the expenditure was £4589 4s. 6d.; so that there was a surplus of £63 10s. 11d. For 1859-1860 the income was £4977 15s. 1d., and the expenditure £5021 19s. 9d.; so that there was a deficit of £44 4s. 8d. Now, both these years, for reasons which it is not necessary to give here, were very bad years; the income was very low in the former, and though better in the latter, it was yet far below the average. However, on the two years there was a surplus of £19 6s. 3d. This was sailing very near the wind, but the just principle of squaring the expenditure to the income was not broken. From July, 1860, to July, 1861, the income was £5660 14s., and the expenditure £5223 16s. 1d.; so that there was a surplus of £456 4s. 2d. The accounts for 1861-1862 are not yet made up; but from an approximate estimate, which will not be far from the truth, the income may be stated at £6000, and the expenditure at a little over £5400, say £5500. There will be a surplus of £500; so that for the last two years there will be a gain of £936 17s. 11d. And yet these two years were exceptional, for in them extraordinary expenses were incurred, which amounted to about £1000. Now, as these will not occur again, but have now really become an addition to the capital, a surplus of from £800 to £1000 may be calculated upon every year."

An asylum thus arranged and planned would be essentially a public asylum, with all those guarantees for good and liberal management which such an institution affords. The profit of the shareholders being fixed within a certain limit, there would be little or no inducement to augment these profits by unjust economy. The feeling rather would be, I hope, to found here in Sussex a middle class asylum, of which the reputation and the cures effected and

the misery relieved would greatly enhance the fixed value of this dividend even to those so blessed in God's mercy as not for one of their own family circle to need its care.

7. *How this capital of £20,000 is to be raised.*—The means by which I propose that this capital of £20,000 be raised is in shares under the provisions of the Limited Liability Act. From what I have just said, I believe such an undertaking would return about £7 per cent., on the lowest calculation; while, should its operation be successful, and further numbers seek admission, an extension of the plan by the erection of detached cottage-asylums would readily and legitimately raise the dividend to £10 or, it may be, £20 per cent. I should, however, be extremely unwilling to see such a plan become a mere means of profitable investment, and I certainly should take no part in bringing such a speculation forward. It is of the essence of my suggestion (and hence I address myself in the first instance to this society, and not to the Stock Exchange) that the undertaking should not be a mere pecuniary speculation. I believe, as I have just said, that, if well worked, a middle class asylum thus established in this county would ultimately yield a return of £10 to £20 per cent. My proposal is, *that the interest on the shares be limited to 7 per cent., and that any subsequent dividend be applied to forming a fund, to which further charitable contributions and legacies be invited, for the reduction of the cost of maintenance in deserving cases.* It is my firm belief that in the course of years a large sum would thus from these two sources accumulate, and so a fountain of charity to the most needy and sorely afflicted of men be opened up. I should indeed feel thankful were I permitted, with your support and co-operation, to begin this work in the county of Sussex.

In so limiting the profits of the shareholders to a fixed dividend, I am only following the practice recognised in most proprietary insurance offices, where the proprietors and the insured mutually share the profits. In this instance I think it better to divest the undertaking of everything of a speculative character, and to leave the rate of dividend on the capital sunk at a fixed per-centage. Farther, as an inducement to take the shares, it may be added that, as this capital must be sunk in freehold land, in buildings, and furniture, there is thus a tangible security for a large proportion of the funds, even should failure attend the undertaking.

I have strictly confined my remarks to-night to the wants and requirements of our own county, and with which my practice at Hayward's Heath has made me familiar. I am not in a position to deal with the whole question of asylum accommodation for the middle class in England, nor have I to-night attempted to do so. I find that in Sussex there is no asylum in which our patients above the class of paupers can be received and healed, except the very high-class house at Ticehurst, adapted only for persons of rank and wealth,

and which, for such patients, is the best asylum of the kind I have seen. But for the large body of the middle class I find there exists in Sussex—and this remark applies equally to the neighbouring counties of Kent and Hants—no asylum accommodation whatever. I have, therefore, come here to-night to ask you, as the most influential body of medical men in Sussex, to consider with me the means whereby this daily want in our practice may best be supplied. I have stated my regret that the remedy which I conceive best fitted to supply the same—a legal power to mortgage the security of the rates for the repayment in thirty years of the building, as suggested to the select committee of 1859 by Lord Shaftesbury—has not been sanctioned by the legislature. I have farther stated my doubt of the wisdom of applying to the voluntary system for aid, as also (which is, perhaps, more to the point) my certainty as to the failure of such an appeal. Lastly, I have suggested a plan rendered practicable by the Limited Liability Act, by which I believe that this acknowledged want of a middle class asylum in Sussex may be supplied, and at the same time a good dividend on the capital thus raised secured; and should my statements have carried conviction with them, I can hardly doubt that in this wealthy town of Brighton a large share of the capital required will soon be forthcoming, nor that the members of the Brighton and Sussex Medico-Chirurgical Society will be backward in aiding the work by their counsel and support.

Considerations with regard to Hereditary Influence. By HENRY MAUDSLEY, M.D. Lond.

“The fathers have eaten sour grapes, and the children’s teeth are set on edge.”—*A Proverb in Israel.*

“Fortes creantur fortibus et bonis
Est in juvenis, est in equis patrum
Virtus, nec imbellem feroces
Progenerant aquilæ columbam.”—*Horace.*

“Τὸ τῆς Ἀνάγκης ἔστ’ ἀδύρσιτον σθένος.”—*Æschylus.*

ALTHOUGH the axiom *ex nihilo nihil fit* may unquestionably in strict logic be pronounced to be a pure assumption, forasmuch as it is not impossible that an enlarged experience may sometime furnish us with an *instantia contradictoria*, yet it is plainly necessary within the compass of human knowledge to consider it an established truth. Within human ken there is, indeed, no beginning, no end; the past is developed in the present, and the present in the prediction of the

future; cause produces effect, and effect in its turn becomes cause. Dust is man, and to dust he returns; the individual passes away, but that out of which he is created does not pass away. The decomposition of one compound is the production of another, and death is an entrance into a new being. This is no new truth, although modern science is now for the first time making good use of it; the earlier Grecian philosophers distinctly recognised it, and it has many times been plainly enunciated since their time. "All things," said Empedocles, "are but a *mingling and a separation of the mingled*, which are called birth and death by ignorant mortals." Plato expressed himself in like manner; and the plain statement of the truth was one of the heresies of the unfortunate Giordano Bruno. The imagination of Shakspeare, faithful to the scientific fact, traces the noble dust of Alexander till it is found stopping a bung-hole, and follows imperious Cæsar till he patches a hole to keep the wind away. The immortality of matter and of force is an evident necessity of human thought.

The doctrine of the conservation of force, which is the modern expression of the old truth—the doctrine which maintains that whatever disappears on one side must reappear on some other side, or, as it has been fancifully stated, that not a breath of air moves, not a wave splashes on the shore, without the movement palpitating through the universe—is now accepted as strictly applicable in physiological science, and is continually receiving new confirmation in the discoveries thereof. When Lavoisier proved that the products of combustion are heavier than the body which is burned, he commenced that exact method which, by means of well-devised instruments and careful experiments, has now resulted in the application, with so great advantage, of exact numerical determination to the phenomena of the animal body. Physiologists are now striving to demonstrate, from the data of observation and experiment, the equivalence of the quantity of force given off by the animal body, as heat and motion, to the quantity supplied in the nutrient material; and although complete success has not yet attended their efforts, they are justly confident of ultimate triumph.* As it seems to be an irresistible impulse of the human mind to make a system, it is not surprising that the more impulsive minds of the physiological school in Germany have rushed forward, and have plainly declared mental phenomena to be subject to the same method of investigation as other phenomena of the living organism. It will readily, however, be understood that they have done no more than proclaim the supposed fact—that they have not

* In confirmation of which it is only necessary to refer to the labours of Dulong and Despretz, Barral, Helmholtz, our own countryman Dr. E. Smith, and to the work of A. Fick, entitled '*Temperaturtopographie der Thiere*.'

Most important of all, as signs of the times, are the recent investigations of Graham on the crystalloidal and colloidal conditions of matter. — '*Philosoph. Transact.*,' 1861.

hitherto been able to do anything whatever towards demonstrating it. Their opinions cannot, therefore, be of any moment in an examination which is not concerned at all with the essential nature of mind, but only with such phenomena as are universally acknowledged to be determined by physiological causes. Though humbler and less ambitious, it is certainly more profitable to deal with phenomena, than it is to aid in the construction of any metaphysical or material Tower of Babel for scaling inaccessible heights.

As now it is well understood that by how much an organism, from its commencement as a germ, grows and developes, by so much does that which is not organism diminish, as in fact material is but transformed in nature and force re-embodied, and nothing new created, it is philosophically necessary, in the cognizable phenomena of any individual existence, to look for certain inevitable antecedents and certain subsequent conditions. There is required, as is well known, in all the higher spheres of animal life, the conjunction of two organisms to generate an organic individual; and in those cases in which the being is produced without the conjunction of parents, it almost invariably proceeds from a single parent of a like kind.* Every living creature has its living antecedent, from which it inherits its plan of being; for, whatever may have happened in primeval times, we have no sufficient evidence that transformation of species now takes place.†

Every little mortal, then, who enters the world, even if it be only the world of a workhouse ward, has necessarily an inheritance. In any case, under any circumstances, it inherits a destiny. It first of all receives and brings with it the plan of being according to which it is to develop; it, in fact, inherits its species. Our most careful observations do not furnish us with anything by which we can distinguish the ovum of a human being from that of a quadruped, and yet there manifestly exists some condition of the human ovum whereby it developes into all the glory and excellency of the human form, and into no other form. It follows a certain aim, and the aim is in itself. The plan is in the substance, as the quality is in the element; it is the law of its nature, according to which it must develop, and no plan exists objectively in nature apart from the particular case in which it is manifested. Plan apart from the particular is a subjective creation of the human mind. Much of the energy which has been wasted in the discussions about transformation of species, might perhaps have been spared if such consideration had been duly weighed; and certainly some physiologists, if they had kept it in

* We say "almost invariably," because in the remarkable case of "alternate generation" the offspring is completely different from its parents, and yet itself produces offspring which returns to their type.

† The experiments of Pasteur are generally believed to have disproved the notion of "spontaneous generation." Professor Wyman, of America, has not, however, obtained quite such decisive results from similar experiments.

mind, would have avoided on certain occasions their extravagant expressions of admiration at the excellent accomplishment of some supposed design in organic nature. The design, as far as it existed, has been in their minds; and they might have done well to have avoided the mistake of transferring the crude, imperfect design of their imagination to the incomprehensible design of creation. The ovum of any individual, being an actual definite production of it, will contain the plan in the matter; for there is no substance conceivable without properties, as there is no property conceivable without substance. We are utterly unable to explain how it is that a certain combination of matter, which we call ovum, has the property of developing according to a certain definite plan, just as we are unable to explain how it is that one element has certain properties, or that any particular law of nature is as it is; but it would certainly be, if possible, less explicable and much more wonderful, if the descendant followed a different plan of development from the parent. The real matter of wonder is the introduction of the plan, the origin of the particular species. Given that, wonder must rightly cease and investigation begin, the problem being the analytical investigation of the complex processes which are connoted in the words, inheritance of species.

If it is certain that a new being derives its plan from its parents, and so far imitates them, it is none the less certain, also, that it deviates from them, and displays variety within the type. Nature not only repeats, but invents; and each succeeding individuality is a proclamation of her fertility in invention. We have every reason to suppose that each new individual is different in something from any individual who has previously existed or now exists—that two beings exactly alike never have lived upon the earth; and if this be so, it is plain that nature is even more fertile in realisations of individuality than the most ingenious and active mind can be in conceptions thereof. And yet the individuality is the result of a combination of parental elements, and must, therefore, contain—latent or more or less manifest—the influence of its physiological causes; it is under the tyranny of the natural law of evolution of the antecedents of which it is the immediate consequent. Parental peculiarities may be very evidently and largely repeated in the offspring, or they may be but indistinctly traceable, or they may not be detectable at all; but even in this last case we cannot but suppose them to have exercised their influence; and, therefore, in some way to be contained in the new individuality. A chemical compound, as sulphuric acid, does not resemble in properties its constituent elements; and, although there can be no exact comparison between the complex vital production of a new individuality, and the comparatively simple formation of a chemical compound, yet it is evident that vital combinations must rather resemble chemical than me-

chanical compounds. And an example from a science which is lower in the order of complexity, may serve to assist the conception of something, if it prove nothing, in the more complex science. When we find, accordingly, that in chemistry we are utterly unable to predict the properties of a compound from the known properties of its constituents, it is no wonder that in the infinitely more complex process of vital production, we sometimes fail altogether to perceive the evidence of parental characters in the result. As the ovum or germ contains in some obscure manner the plan of the species, or, more justly, the plan of the individual of the species from whom it proceeds, the offspring into which it develops must inherit that which really constitutes the nature of the particular germ. Furthermore, as it is certain in our experience that out of nothing nothing comes, it is certain also that something cannot become nothing; and, accordingly, whether we can detect them or not, the necessities of our thought compel us to assume the existence of the parental elements of individuality in the offspring.

It seems to have been more or less generally assumed that hereditary influence was to be recognised only in visible manifestations of parental characters in the offspring; that the effect in a vital production was, as in a mechanical compound of causes, the sum of the acting forces. But such a supposition, if it exist, is manifestly very false. When we cannot discover any imitation of the parents in the new being, there is none the less a necessity to acknowledge the variety or invention to be determined by some mysterious combination of the parental elements. Suppose that a certain inherent evil of a particular kind taints the character of one or both parents, and that, nevertheless, there exists no evidence of any such evil in the child, are we therefore to say that the parental evil has had no effect upon the child—has been, as regards it, as good as non-existent? Are we not rather bound to suppose that the evil in one of the causes has been happily modified, counteracted, or neutralised by the influence of other causes co-operating in the formation of the embryo, or by the force of circumstances affecting its development after birth? And if this be so, the happy elimination of the evil is the result of so much force expended in counteracting a positive viciousness, and really testifies to the influence of the antecedent condition upon the result. On some such supposition only is it possible to explain the phenomenon of Atavism, in which some bodily peculiarity or disease is seen to skip one generation and to reappear in the next. The peculiarity or disease must have been somehow latent in the generation in which it did not appear. As the compound in chemistry is formed by the combination of certain definite proportions of the elements which unite to form it; as, therefore, not a single atom of these elements but is of essential consequence to the definite result; so, in the much more

complex compound, which a new individuality is, the combining elements cannot be conceived to unite capriciously and under no definite laws. Every effect or defect in the parent must be subject to the fixed laws of individual production, whatever they are; and, in considering the nature of any defect or effect in the offspring, we may accept with certainty the proposition of Polonius, that "the effect defective comes by cause!" "How shall a man," asks Emerson, "escape from his ancestors, or draw off from his veins the black drop which he drew from his father's or his mother's life?"

It is a conclusion which, in a purely physiological sense, can scarce be avoided, that the embryo is indebted to its progenitors for all that is contained in its corporeal nature; it is the necessary organic consequent of certain organic antecedents. The parental peculiarity which it may seem to want, and the individual peculiarity which seems an entirely new production, are explicable on the same supposition of an obscure and complex combination of elements for the formation of a new product, which does not resemble its constituents in properties, which is not the reproduction of them in a mixture, but the new distribution or development of them in a compound. Though parents thus enjoy a sort of immortality in their offspring, it is, as with all earthly immortality, under a new combination of matter and a correlative metamorphosis of force. The parental forces are combined, ere their dissipation through decay and death, into a new individuality, and thus the human past is continued into the future. The law of causality is true of organic as of inorganic existence. "Though his father die," says the son of Sirach, "yet he is as though he were not dead; for he hath left one behind him that is like himself. While he lived he saw and rejoiced in him; and when he died he was not sorrowful. He left behind him an avenger against his enemies, and one that shall requite kindness to his friends."

Having so far pointed out how the necessities of human thought seem to demand the recognition of a large play of hereditary influence in human development, it may be added, that men have, as might be supposed, in all ages more or less distinctly acknowledged it. The belief has affected in an important manner systems of religion and philosophy; but nowhere, perhaps, has it been more plainly enunciated than in the ancient books of the Hindoos. To it the institution of caste unquestionably owes its origin; and the feeling of a destiny made for a man by his ancestors, inspired the philosophy of that sect of the Hindoos which taught the perpetual rebirth of mortals, and the development in this existence of the deeds done by them in a former state of being. "The antecedent life of a being," it was said, "is his destiny." Where castes existed, the hereditary descent of professions was obligatory;

but this prevailed also in Greece, where it was not obligatory. Plato openly maintains that the wicked owe their wickedness to their organization and to a vicious education, so that their fathers and instructors ought really to be blamed. The Levitical code prohibits marriage within certain kinship; and Solomon deems it one of the merits of a good man that he leaves an inheritance to his children's children. On the other hand, the sins of the wicked are visited upon the children unto the third and fourth generations; and it was not a matter of wonder that those whose fathers stoned the prophets should reject Him who was sent unto them—"Ye are the children of those who stoned the prophets." Though an institution of castes is not recognised in England, something very like it, nevertheless, does exist. What but the belief in the hereditary influence upholds the esteem for ancestral blood, and dictates the common saying, which is the generalisation of common experience, that it takes three generations to make a gentleman? "Bless not thyself only," says the author of the '*Religio Medici*,' "that thou wert born in Athens; but, among thy multiplied acknowledgments, lift up one hand to heaven, that thou wert born of honest parents, that modesty, humility, patience and veracity lay in the same egg, and came into the world with thee. From such foundations thou may'st be happy in a virtuous precocity, and make an early and long walk in goodness; so may'st thou more naturally feel the contrariety of vice unto nature, and resist some by the antidote of thy temper."

In almost every nation which possesses a history, families might be selected that have been remarkable for special characteristics. The Claudian genus was noted at Rome for its pride, cruelty, and ferocity. Of it came the morose and cruel Tiberius, and so also Claudius, Caligula, and Nero, in whom this mighty curse of humanity ended. "The Apii," says Voltaire, "were always haughty and inflexible, the Catos always severe!" The Guises were as specially remarkable in France as the Napiers have been in England. The Jews and the Gipsies have both preserved their mental and bodily characteristics in a notable manner.

It has been the custom in some countries to expose to certain death, or at once to destroy, weakly and deformed children, lest their infirmities should descend through generations and deteriorate the race. And measures even still more energetic have been adopted to prevent the injurious operation of hereditary influence. "Heretofore, in Scotland," says Hector Boethius, "if men were visited with the falling sickness, madness, gout, leprosy, or any such dangerous disease, which was likely to be propagated from the father to the son, he was instantly gelded; a woman kept from all company of men; and if, by chance, having some such disease she was found to be with child, she with her brood were buried alive."

The astrologer, conscious of a fate in human life, gazed curiously

into the heavens, and deemed that by a knowledge of the stars in the ascendant at the time of a mortal's birth, he might predict a mortal's destiny. But the astrologer failed to find in the heavens the cause of a fact which he had not failed to perceive; his predictions were not verified by results; and one fact, which has refuted the extreme advocate of hereditary influence, might have sufficed to refute him—it is the fact of different moral dispositions in double monsters. The celebrated twins, Rita and Christina, were so fused together that they had only two legs between them; they had two legs, four arms, and two heads; and yet they were quite different in disposition. Two twin sisters in Hungary, who were united by the bottom of the back, lived twenty-two years. They were, says Barthez, of extremely different temperament, and yet their blood was the same; for, after death, the blood-vessels were found to communicate by an extremely large opening. Other such cases are on record; and they plainly prove that hereditary influence is not a mere matter of repetition or imitation, but that it operates, in accordance with unknown laws of vital combination, in producing new compounds or inventions.

That dread inexorable destiny, which plays so great and grand a part in Grecian tragedy, and which Grecian heroes with a praiseworthy inconsistency so often struggled against, while they believed in it, was seemingly a generalisation from that feeling which every reflecting individual has, of the inevitable dependence of the present self on its antecedents in the past. Strive as diligently and ingeniously as philosophy may, to demonstrate the dignity of the human will, man feels at the end of all that, whether strong-willed or weak-willed, free or a slave, he is inevitably what he is. It is the law of causality manifesting itself in human consciousness. "There is," says Schelling, "in every man a certain feeling that he has been what he is from all eternity, and by no means became such in time." We feel instinctively the line of causation which runs through existence, the claim of necessity "wherewith we're darkly bound." And the persevering way in which we uphold our power of self-determination, as Laius of old resisted the oracle which all the while he believed, is a scarce less decisive proof of this feeling of dependence than a direct acknowledgment would be. As authors often write against the imperfections which they feel in themselves, so humanity struggles against the necessity within which it moves, and constructs out of its frailty a helpful philosophy. Surely it is meritorious thus to strive upwards, if we regard ourselves only as beings with present duties to do; but it is much more so if we regard ourselves as causes occupied in making a future. So far, unhappily, it is only in the highest human art that we find human aspirations realised; for hitherto mankind has not been able to live its art. It is much easier, indeed, like Romeo, heartily to wish to "hang up"

philosophy than to live it, when the great afflictions of life demand it and supply the exact conditions of its applicability.

Friar. "I'll give thee armour to keep off that word,
Adversity's sweet milk, philosophy,
To comfort thee, though thou art banished.

Romeo. "Yet banished! Hang up philosophy;
Unless philosophy can make a Juliet,
Displant a town, reverse a prince's doom:
It helps not, it prevails not: talk no more."

Even when our greatest teachers utter with placid decision maxims which should inspire humanity to great efforts in self-development, it is but too evident that they are speaking from the philosophical platform; and a backward look into their lives, or the observation of unguarded moments, and of that which, in the moments of great affliction, is the genuine utterance of their nature, reveals very clearly the difference which there is between man making art and man making life. Goethe, for example, in one part of his writings, compares a man entering on life to a sculptor who is placed with chisel and mallet before a block of marble; he may make what figure he pleases; and in like manner man should determine circumstances and make his own destiny. It is excellent philosophy; but let us not forget what comfort Goethe on one occasion is obliged to take to himself when recalling in age the bitter recollection of a gloomy period in youth when he cruelly forsook one, who in her great love had very great claims upon him. A man, he thinks, must declare once for all that that is right for him which is conformable to his nature, to the law of his existence: a much more comforting philosophy for poor, erring human nature! There is, indeed, no help for it; no mortal can transcend his nature; and his present nature is by no means a present production; it has descended from the past through regular laws of development. And while much is unquestionably done in individual formation by means of education and circumstance, the foundation on which all rests is not acquired but inherited. The destiny of an individual is innate in him.

Not only, then, does the recognition of hereditary influence, when closely considered, seem to be a necessity of human thought, but it is found to be more or less distinctly manifest in all the records of human thought. Moreover, the actual condition of mankind on the different parts of the earth's surface testifies to the existence of a law of hereditary transmission.

Whether it be true that mankind have spread over the earth from a common centre, or, as some ethnologists would maintain, from a few centres, the fact must in either case be accepted as evidence of the hereditary transmission of qualities. To place an inhabitant of the tropical regions in the extreme north would be to ensure him a speedy death; and the inhabitants of the north who pass to hot

climates, decay and die out in a few generations. And yet men do live in the torrid climes of the tropics, and in the frozen regions of the north. The diffusion of mankind over the earth must then have been accomplished in a very gradual way, in ever-widening circles, which followed one another after intervals of generations. Thus the race which had left its old country for adjacent lands, having adapted itself to the different conditions of the new climate, would transmit to the next generation an innate adaptability thereto; and some from this generation again or from its successor, wandering still farther away to a climate that differed perhaps but little from that which they had just left, although considerably from that which their forefathers left, go through a similar process of naturalisation, and similarly transmit their acquired nature. And so, like the widening undulations on the surface of water, mankind have spread from the centre, until the uttermost parts of the earth have been reached, and the dark places thereof peopled. It is on this power which organisms have of accommodating themselves to changed circumstances by respondent nutritive changes, which are then inherited by the offspring as natural endowments, that two important arguments rest—the argument for the unity of origin of mankind, and the argument for the transformation of species.

The cause of the hereditary character of our social and political regulations has been sought for in hereditary influence as a natural fact. "It is from the vital fact," says Dr. Lucas, "that the social fact proceeds." And as the latter is universal, it must be founded in nature, "for the generating principle of any convention that is universal and permanent is nature."* A man transmits to his children an inheritance of organic qualities by a law over which he has no control; but he consciously imitates nature in that over which he has control, and leaves by testament his acquired property to his children. And should he fail to make such provision, the law ordains that his children shall inherit. The social fact is the expression in human consciousness of the natural fact.

The organic adaptation to a change in external circumstances, which has taken place amongst mankind, is continually taking place also amongst the lower animals. The peculiarities of conformation by which domesticated animals are distinguished from wild ones of the same species, and the instincts which they have acquired, have all been gradually developed in them, and have arrived at their present condition by the action of hereditary influence through many generations. They are the harmonious adaptations of organic nature to new circumstances—a phrase of that correlation between organic life and external nature by reason of which organic life is possible.

* 'Traité Philosophique et Physiologique de l'Heredité naturelle,' par le Dr. Prosper Lucas, vols. ii:—Full of information; for it contains almost everything that has ever been written on the subject.

And if the favorable conditions of domestication are removed, the same influence gradually undoes the work which it had done. Pritchard observes that when a flock of sheep is neglected, and no attention paid to the breed in selecting rams and ewes of the finest breed for propagation, the fine wool gives place to much coarser growth intermixed with strong hairs. "The breed seems gradually to degenerate towards the character of the Argali or wild sheep of Siberia, which has generally been supposed to be the original stock whence all the varieties of domesticated sheep are derived."* It has been observed, also, that when horses return to the savage state, modifications are after a time produced in the capacity of the cranium, and that the head becomes stronger and much more irregular. Blumenbach had remarked similar differences between the wild and the domestic hog; and Dr. Roulin confirmed his observations on hogs that had become savage in the new world. It is to be presumed that if the Bosjesman, the Chinaman, the native Australian and the European were placed under exactly the same conditions of existence, they would in the end assimilate to a common type. Thus hereditary influence may continue onwards the development of a race or may continue the degeneration of it; indifferent to consequences, it helps to make a variety or to eradicate it. But whichever part it play, it is plainly a law of the utmost importance in the economy of nature.

It may probably seem strange, after the foregoing remarks, that any one should deny positively the reality of hereditary influence. And yet, strangest of all, that has been done by a learned and thoughtful writer, who was engaged, when overtaken by an untimely death at Damascus, in writing the 'History of Civilization.' With a remarkable inconsistency, the author of a 'History of Civilization' denied the reality of that by which alone civilization seems to be possible; for it is a question that may very well be asked, as to whether there would have been any civilization if there had not been hereditary influence. And whatever may be the answer to the general question, it may be very distinctly acknowledged, from the results of experience, that there is no hope of cultivation for the native Australian or the Bosjesman save from the operation of hereditary influence through many generations. Certainly it appears but a very small and uncertain hope, when we reflect that another law may intervene to prevent the beneficial action of hereditary influence—the law by which, in the struggle for existence, the stronger variety ever crushes out the weaker.

On a cursory reflection, it might appear to be anything but creditable to physiological science that what has been so long and

* 'Physical History of Mankind,' vol. i, p. 363. It may be well to state here, that in this general paper, devoted mainly to the statement of the difficulties of the subject, no attempt will be made to give every reference.

so generally acknowledged should still be so little understood. History cannot direct us to any nation in which the reality of hereditary influence has not been accepted; and yet there is not a single law of its action known at the present day. But can this justly be made a reproach to physiology? It is unquestionably true, as Comte observes, that 'the discovery of gravitation—the first great acquisition of positive physics—was contemporaneous with the discovery of the circulation of the blood—the first fact which rendered positive biology possible; and that there has been an immense inequality in the progress of the two sciences since that time;' it is true that the astronomer can predict the events of heaven and foretell the existence of unseen worlds, while the physiologist can predict little more than his error if he ventures to predict; it is true even that physics is a science, while biology is yet very far from justifying its name; but when all has been said that can be said in praise of one and to the discredit of the other, the matter stands exactly as it should do, as it inevitably must do. Physiology must, from its nature, wait for the development of the other sciences; for it can be rightly built up only on a knowledge of the laws which prevail and of the forces which are at work in every other part of nature. The forces which are concerned with molecules, the attraction of cohesion and the repulsion of heat, the forces which produce undulations whether of sound or of light, the forces of polarity, electric and magnetic, the chemical forces, and perhaps even, what is still a matter of dispute, other special forces, are supposed by and engaged in the living organism; so that the sciences of material bodies (physics) and of chemical bodies (chemistry) are presupposed by biology or the science of living bodies. The order of development of the sciences must correspond with the order of development of the natural objects wherewith they deal; and as man is the compendium of nature, a full knowledge of his organism necessarily supposes an inductive advance through nature.

There is really no fair comparison between the discovery of the law of gravitation and the discovery of the circulation of the blood; for while the former may be justly called the starting point of positive physics, the latter occupies no such position in physiology. The law in physiology which will correspond to the law of gravitation in physics, but which has not yet been discovered, is the law of life. And when the chemist or physiologist has succeeded in analysing the relations of the complex combination of physical and chemical forces out of which it is now the fashion to suppose life to result, and synthetically combining them again so as to produce life, it may then be confidently expected that there will quickly be as rapid an advance in physiology as there has been in physics since the discovery of the law of gravitation.

It requires, then, but little consideration to see that it lies mainly

in the nature of the subject, as involving a knowledge of life, that little or nothing should be known of the laws of hereditary influence. When the simplest manifestation of life presents an insoluble problem to the investigator, the more complex vital phenomena will certainly not admit of explanation. There are, moreover, great difficulties in the way of observation of those facts of hereditary influence which do lie within the sphere of human cognition. The observations, to be of real service, should be patiently continued and carefully recorded through many generations; and men are for the most part far too careful about the present, far too anxious about the fame which comes to the successful generaliser, far too little alive to the humble purpose of individual life, diligently and conscientiously to gather facts from which they receive no honour, laboriously to plant that which shall not bear fruit for many generations, if it ever bear fruit at all. And even in these observations that are made it is impossible to discriminate between the many circumstances, and to assign to each its due weight of influence in determining the way of hereditary action. Accordingly, we constantly find that imperfect observation misleads to false conclusions; so that no sooner is a theory set up by one investigator, than another eagerly hastens to repudiate and refute it. Linnæus, for example, held that in hybrid plants the interior, or the organs of fructification, resembled those of the female; the exterior, or organs of vegetation, those of the male; notwithstanding which, De Candolle maintained the opposite, and facts upset both theories. Similarly opposed theories have been upheld with regard to animal hybrids, and with a similarly unsatisfactory result. Dr. Pritchard endeavoured to develop this law as regards man—that all original or connate bodily peculiarities tend to become hereditary, while changes in the organic structure of the individual from external causes during life, end with him and do not affect the offspring—which, however, so far from being, as Sir Henry Holland supposed, a general law which “may be deemed highly probable if not proved,” is in direct contradiction to daily observation, was denied positively by Müller, Burdach, G. St. Hilaire, and Flourens, and was ultimately abandoned by Pritchard himself. It results, in truth, from the manifold opposing theories which have prevailed, and still prevail, that an account of hereditary influence must be for the most part a statement of the difficulties inherent in the subject, and a discussion of the circumstances and conditions which there is reason to believe are more or less operative, and interfere with the acquisition of exact knowledge thereupon.

It will not be without interest to detail some of the circumstances which are connoted in the comprehensive term, hereditary influence. And, in the first place, it is evident that there are manifold causes in the condition of the parents, previous to the act of procreation, which

must greatly affect the destiny of the progeny. The complete history of an individual should begin with what has happened, not only before he was born, but even before he was begotten.

It is observed in the production of hybrids, that there is a greater potency in one species than there is in the other; and that, in accordance therewith, the offspring has more of the characters of the more potent species. The "potency of the species" is, therefore, recognised as a fact in hereditary influence under such circumstances. But a similar difference has been observed in the potency of different varieties of the human race. According to Rush, the Danes, intermarrying with women of the East, produce children of a European type, whilst the converse does not take place when Danish women intermarry with men of the East.* The Dane, then, has the greater potency in this case. There is, furthermore, a difference between the organic force, or potency, of individuals belonging to the same variety of the human race; there is, in fact, a "potency of the individual." It is evident, then, that, under the condition of perfect health in both parents, the nature of the offspring will be in greater degree determined by the more potent of the individuals concerned in its production. But while this takes place as a natural fact, it is further evident that the organic force or potency of the individual will itself be greatly modified by different conditions of age and health, and by the temporary circumstances, psychological and physiological, accompanying any particular act of procreation. As regards age, for example, Giron de Buzareingues concluded, as the result of his numerous observations and experiments upon animals, that the offspring of an old male and a young female resembled the father less than the mother, in proportion as the mother was more vigorous, and the father more decrepit; the reverse was true of an old female and a young male. He also found that, by putting very young rams to vigorous females, he obtained a preponderance of female lambs, while he could obtain a preponderance of male lambs by putting strong and vigorous rams to the ewes. The best result is said to be produced in the human kind when the male is a few years older than the female.

The state of health at the time will evidently influence to an important degree the individual potency. Where there is great physical exhaustion in one or both parents from disease, from licentious sensuality, or from any other cause, the organic product in an act of such intense vitality, must suffer seriously from want of force. There may, indeed, exist every degree of deficiency in procreative power down to actual impotence or sterility. When conception has taken place, abortion may terminate embryonic life at an early period, or

* Quoted by Burdach, in his 'Physiology,' also by Lucas. Indeed, the few facts which are known, may be found repeated in every book which treats upon the subject.

miscarriage may do so at a later period ; or again, the foetus may with care arrive at birth, and then, by reason of its inherent deficiency, sooner or later perish in convulsions or otherwise ; or, last and worst of all, the child lives on, visited with its father's or mother's sins, when its nature inherits their acquired infirmity, and perpetuates through time the effect of their vices. "My son," says the son of Sirach, "keep the flower of thine age sound, and give not thy strength to strangers. When thou hast gotten a fruitful possession through all the field, sow it with thine own seed, trusting in the goodness of thy stock. So thy race which thou leavest shall be magnified, having the confidence of their good descent."

Other causes, it is plain, besides physical disease and immoderate sensuality, may so diminish organic force as to interfere with the due accomplishment of the propagative function. As an individual only embodies so much force, and by no means has an unlimited supply thereof, it seems an unavoidable conclusion, that what he spends in one way, he is so much the loser by in another. So that, just as those who are given over to immoderate sensuality are notably incapacitated for great intellectual exercise, so those who use all available force in intellectual work will be deficient in or destitute of the force necessary for due procreation. It is a common observation, and it always has been so, that the intellectually great have very indifferent sons, for which Cardan assigned this reason, "*Quoniam spiritus sapientium ob studium resolvuntur et in cerebrum feruntur à corde;*" and Lemnius agrees, "*Quod persolvant debitum languide et oscitanter, unde foetus à parentum generositate desciscit.*" Whether the explanation be correct or not, it admits of no dispute, that great mental exercise, like great bodily exercise, diminishes sexual desire and lessens sexual power. The giants in mind, like the giants in body, appear to be often incapable of procreation. Moses interdicted sexual union during a time of war ; and Bacon observes, that the greatest achievements in the world have been mostly effected by childless and unmarried men. Such is the compensation in nature, that what these great men gain in one direction they lose in another ; and it appears as if nature were exceeding jealous of allowing to any individual an immortality both in his works and in his progeny.

Burdach came to the conclusion that great men have generally proceeded from simple parents, and have belonged to common, poor and unknown families ; and Nehusius has shown by an account of the genealogy of the most celebrated persons of ancient times, how greatly the sons of the great have degenerated from their father's excellence. By what singular hap, he asks, could there proceed from the wise Pericles two brutes like Paralus and Xanthippus, a madman like Clinias ? from the just Aristides an infamous Lysimachus ? from the grave Thucydides a foolish Milesias, a stupid

Stephanus ; from the temperate Phocion a dissolute Phocus ; from Sophocles, Aristarchus and Aristippus ; from Themistocles and Socrates the vilest sons ? The son of Cato was infamous for cowardice and immorality, the son of Cicero was a drunkard and a debauchee ; Caligula was the son of Germanicus, Domitian the son of Vespasian, Commodus the son of Marcus Antoninus. It might verily seem, as Lucas says, that there is a fatality which prevents the sons of eminent men from being worthy, by their intelligence and virtue, of their fathers. The fatality, if it really exist, must be the fatality of natural law.

If, however, it is the common opinion that great men have foolish sons, the opinion also commonly prevails that great men have had clever mothers. The proposition is of extremely doubtful worth, and rests rather on the popular wish to have it so, and on the evidence of a few notable cases, than on the careful observation of well-considered instances ; but even if it be true, it does not diminish the value of what has been before said. The maternal cleverness in such case will be found to have been of that quiet, self-contained, self-denying kind, which was concerned mainly in promoting the welfare of the family, and not of that description which bursts out into literary inflorescence or any other such demonstrative dissipation of force. When great power is thus restrained within a definite application, the children receive the benefit of it ; but when it is dissipated abroad, the universe may have the benefit of it, but the children have not. It is surely only reasonable to suppose that, whilst a new life is being formed and developed within her life, a woman needs all her force at home, and has none to spare for philanthropic enlightenment of humanity. Are not our intellectual women commonly unmarried or barren ? And is not the mother of genius the self-sacrificing woman, whose best energies have been absorbed in her family ? It is probable that an attentive observation of the families in which a great man has appeared might not unfrequently show also that there was a really great, if not famous, father or grandfather, in whom there was a vast amount of undisplayed force. But though undisplayed to the world, not on that account inoperative. The flowering progeny has received the benefit of it, and expends it. Still, for his brilliant display he owes a large debt of gratitude to that silent, self-reliant, self-contained, self-denying father or grandfather, who has quietly done his duty without thought of the world's applause, and fashioned the vigorous stock which now blossoms, in so goodly a manner, to the admiration of the world.

It is not, if the foregoing remarks are correct, an argument against the reality of hereditary influence because the son of an eminent man is a notable fool. The eminent man has given all the best of himself to the world, and his son has inherited what was left ; he has been a friend of humanity, and humanity must now

befriend his son. Perhaps he might have been actually as great, though not so eminent and prominent, a man, if he had not made his existence known to the world; but in him the time of blossoming of the family tree arrived, either in due natural course or accelerated by the forcing influence of opportunity; and he blossomed accordingly and bore fruit, which has been taken up by nature, and will follow its course there. But the family, after such a display, must rest through a long obscurity, if it does not become extinct. A French writer, Benoiston de Châteauneuf, who has studied the subject, professes himself astonished at the rapidity with which illustrious families die out.* Scarcely any of them survive the third generation, and yet "as short a time as they last, almost all survive the glory of their name." The family of Boileau hardly lasted two hundred years, notwithstanding thirteen male children; that of Racine did not continue beyond three generations; Molière died without leaving any children; Corneille was never married; Bailly, Lavoisier, Condorcet, left only daughters behind them. And where, it may be asked, are the families of Shakespeare, of Milton, and of Cromwell? There was no child to perpetuate the title of Baron Verulam, and Newton was never married. When a family can trace its genealogy up to the time of William the Conqueror, it is presumptive evidence that it has never produced a true man of genius.

If we consider the fundamental relations of the instinct for propagation, we may, perhaps, more clearly perceive the antagonistic relation which must exist between the exercise of the function and great intellectual exercise. It is customary to say that there is implanted in the organism an instinct or impulse for self-conservation, by virtue of which it appropriates material and grows, and, after it is full-grown, maintains its state. Whether there be any such instinct or not, the term happily describes a series of actual phenomena. Now, at that period when the organism has nearly attained to its full growth, and when, therefore, there is a superabundance of force which is not required for the purposes of the individual, another instinct or impulse appears, the aim of which is not the conservation of the individual already provided for, but the conservation of the species. Its mission accordingly is, not to appropriate material and force, but to dissipate them, to give back to nature in definite form something of that which has been withdrawn from it. It is the instinct of propagation, by the prompting of which the individual is moved to act for the continuation of his kind, which is in a certain sense the propagation of himself, through time. Obviously this instinct might be logically resolved into a special mode of manifestation of the self-conservative instinct; for it is certain that a man

* *Annales d'Hygiène publique et de Méd. Lég.,* "Mémoire sur la durée des familles nobles en France."

does not proceed to the sexual act with the design of begetting children, but simply with the object of gratifying himself. Nevertheless it is convenient, on account of the speciality of its phenomena, to consider the propagative impulse separately. In man, then, both these instincts must necessarily appear in consciousness, and display themselves there in their highest developments. The instinct of self-conservation, in consciousness or out of consciousness, prompts the acquisition of that which is pleasing and the avoidance of that which is painful; it is, in fact, that self-feeling which lies at the root of all our emotions, and, indeed, of our conscious individuality. It necessarily goes on alone for some time, acquiring power and laying up stores in development, inasmuch as the propagative or distributive instinct does not make its appearance until growth is nearly completed. The youth gains knowledge, strives for what is pleasing to himself, avoids what is disagreeable, is markedly selfish, and, indeed, acts consciously, as the self-conservative force of his organism does unconsciously. But in due time the propagative impulse manifests itself in the organism, and it must necessarily appear about the same time in consciousness. Accordingly, new ideas and feelings appear in the mind with the development of the sexual system; there is, as Goethe aptly expresses it, "an awakening of sensual impulses which clothe themselves in mental forms, of mental necessities which clothe themselves in sensual images." This new budding forth of beautiful ideas, like the expansion of the flower which foretells fructification, marks the appearance of the propagative instinct in consciousness; and the youth, in all likelihood, begins secretly to write poetry, or in other indefinite ways to satisfy his mental longings, being moved to communicate himself by an impulse which he cannot explain. It is certain that the instinct to communicate their ideas is, in those who have any, as natural as the instinct to continue their kind; and as the latter effects the conservation of the species, so the former, by preventing knowledge from dying with the individual, perpetuates the mental gains of the species. If, then, the individual organism is capable only of developing a definite quantity of force, which it acquires in accordance with the self-conservative law of its existence, there exists a sufficient reason why those who, in accordance with the distributive law of propagation, are displaying excessive force in intellectual exercise, should lack procreative power; and, on the other hand, why those who are sensually abandoned to the gratification of the sexual desire should be incapable of mental exercise, and even fail in mental power. An instinct is not inexhaustible, and if the force of it is drawn off in one direction it is not available for use in another.

So far, certain causes have been specified which seem likely to be of influence in diminishing procreative force; but there are other causes which may seemingly produce qualitative modifications in it

or in the specific material which is its necessary substratum.* Mental conditions exercise an effect upon the seminal secretion as plainly as on any other secretion of the organism. Indeed, if it be allowable in these days of positive science to speak of its vitality, it may be described as more vital than any other secretion, and as having the closest connections with that which is the culmination of vitality, namely, mind. Certain ideas of a lascivious character largely increase its quantity, and probably modify its quality; and an appearance of new ideas and feelings in the mind corresponds with the appearance of spermatozoa in the testicles. But if we suppose, as physiologists now generally desire, that its physiological functions stand in the most intimate causative relation to its chemical constitution, it is necessary to add that its chemical constitution is of so complex a character that, often as it has been investigated, very little is known with certainty thereupon. A very interesting discovery of Kölliker is that the semen contains a substance resembling a brain fat, the so-called "myelin," of Virchow; it is not yet quite certain, however, that myelin is a simple fat. It will be of no less importance if a statement by Gobley be confirmed, that the semen of fishes contains a compound of glycerine and phosphoric acid, which may also be obtained from brain. Such results of positive investigation irresistibly call to mind the expression of Alcmaeon, an ancient writer upon medical subjects, who, on account of its vast importance, called a drop of semen a drop of brain. What is plainly certain with regard to it is that it has a very complex chemical constitution, as its physiological functions would lead us to expect; that it is, so to speak, of the highest chemical dignity. While some secretions are produced only to be excreted, and have been examined with considerable precision as to their chemical nature, as, for example, the urine; and while others are secreted for chemical use in nutrition, and have also been satisfactorily investigated; the spermatic fluid has a constitution which is at present inscrutable, and a function which appears almost miraculous. But the very complexity of its composition, in connection with what we know of its close relation with mental phenomena, justifies us in assuming that it will be more affected in quality by disturbing mental causes than a secretion which is more simple in composition and less important in function.

Recent experiments in physiology, especially those of Ludwig and Bernard, have proved that the nerves exercise a direct power over

* In using the term "procreative force" it is obviously not intended to designate a single distinct force; it is but a general term used provisionally to denote the many conditions which are concerned in generation. Science will some time be able to say whether these conditions are physical, chemical, or vital, or result from a combination of the three; but until that time comes, we need some term to express them.

secretion, independent of any charge which they may produce in the calibre of the vessels supplying the glandular organ. These direct observations have so far reference chiefly to the quantity of the secretion, but it admits of little doubt that the quality may be affected also. It is now acknowledged, on sufficient evidence, that nervous action may directly influence nutrition; and Bernard some time since discovered that injury to the floor of the fourth cerebral ventricle caused the immediate appearance of sugar in the urine. Popular opinion has always accepted the influence of mental states on the secretions. Emotion causes the tears to flow; fear diminishes the flow of saliva, so that the tongue cleaves to the roof of the mouth; and anger is said sometimes to vitiate it so that it becomes poisonous, like as it does under certain circumstances in the mad dog. Emotion is usually credited with an influence upon the biliary secretion, and instances are related in which maternal passion has so affected the milk that the infant has been instantly poisoned thereby. The very powerful effect of emotion on all the processes of organic life is amply attested by common observation; and Bichat's location of the passions in the organs of organic life, though not tenable as a theory, does no more than justice to the close relation which unquestionably exists between them. Having, then, such positive general evidence of the effect of nerve force on secretion and nutrition, is it not an inference which is almost unavoidable, that so highly endowed a product as the spermatic fluid cannot escape the influence of the mental conditions under which it is secreted? It carries in some mysterious manner the moral qualities of the parent into the offspring; a single spermatozoon may contain the potentiality of a Socrates or of an idiot, and it may well, therefore, contain also some effect of the mental state which existed during the time of its secretion. Temporary mental conditions of the parent will thus obtain a realisation in its nature, and, through it, in the nature of the new being which it may generate. Here, as everywhere else in nature, we are taught the eternity of action of any kind—that nothing perishes absolutely in the universe, not even a gust of passion.

What has been said of the sexual product of the male may be applied to that of the female. The ovum is in the female that which the spermatozoon is in the male; and, although it might at first sight appear that the former is a nutritive product, while the latter is a secretion, it must be remembered that secretion and nutrition are so closely allied that what can be shown of one may be confidently assumed of the other. The ovum might even be called the sexual secretion of the female, for it is produced in a Graafian vesicle, which is the homologue of the seminiferous tubule in which the spermatozoon is generated, and, when not impregnated, it is discharged as a useless excretion. With the first discharge of the

ovum, as with the production of the spermatozoon, very important changes take place in physical and mental development; and mental disturbances interfere in a marked manner with the regular system according to which the ovum is matured and discharged in health. The connection between disturbed ovarian action and disturbed mental action is a most frequent observation in the pathology of insanity. If we accept the physiological proposition, that the functions of the structure are determined by its physical and chemical qualities, a very complex chemical constitution may be predicted for the ovum. Very little, indeed, is known with certainty as to its composition, except that it is very complex. It is known, however, that, like the semen, it contains a substance which, on decomposition, gives rise to the compound of glycerine and phosphoric acid. And it is necessary to assume of it, as of the spermatozoon, that the specific differences in the results of its development must be dependent on differences, quantitative or qualitative, in its constitution, although such are not at all detectable by our present means of investigation. It is by their results only that we recognise them. And it is furthermore a necessary conclusion, in view of the notable influence which mental emotions have upon the destiny of the ovum, that its constitution and, therefore, the character of that into which it may develop, must be influenced in some degree by the existing mental state of the individual during the time of its production.

The foregoing observations render it evident that, even if a particular spermatozoon and a particular ovum were given, and the problem were to determine the results of their vital combination under the simplest possible conditions, it would be completely insoluble. For, in the first place, we are ignorant of any single law of so-called vital combination; and, in the second place, we are utterly ignorant in the present case of the elements in the combining substances. There are, however, yet other causes which appear to have an effect upon fertilisation, and which further complicate the matter.

A cause of considerable power, in its interference with any simple law of evolution of the parental characters in the offspring, is sometimes met with in the strange effect which one conception may have on all succeeding conceptions. It is a remarkable and at present altogether inexplicable fact, that the influence of the male upon the female in one fruitful copulation may be such that, though he never come near her again, one or all her future conceptions by other males bear more or less plainly his stamp. A white woman who has borne a child to a negro, and is afterwards married to a white, may have children with more or less of the negro in them. The mare that was once covered by the quagga ever afterwards produced foals with the quagga marks upon them. So much alive are breeders to this fact, that an inferior horse is not

permitted to cover a good brood mare, lest she be thereby spoiled for breeding; and so likewise is it with other well-bred animals. It appears wonderful that one small spermatozoon should contain the character of the creature producing it, but the wonder is greatly increased when we reflect that, though this minute body penetrates the ovum and disappears in the development of an embryo, which in time leaves the female body, its effect has nevertheless been such that the female has been more or less strongly impregnated with its character, and may henceforth communicate its influence to all the ova which she produces.* Strange, however, as the fact certainly seems, it is not, when we reflect, singular in its mystery. The marvellous effect which is produced upon the whole body by the introduction into it of an inappreciable quantity of a certain virus, as, for example, that of smallpox or syphilis, is not less inexplicable. As the virus of either of these diseases affects the whole body and determines certain special eruptions, so the spermatozoon seems similarly to affect the whole body and determines a special product. And one fact is as great a mystery to us as the other. It may readily be imagined, however, what a disturbing element such a mysterious action must be in any attempt to trace the way of hereditary influence. Children born to a second husband may have physical and mental traits of a first who is mouldering in his grave. And, in truth, such a disturbing cause has yet wider relations. The mental and physical condition of a male during the procreation of a first child may actually be supposed to affect the character of one or more of his children subsequently begotten; and as a certain influence may be thus left behind on the female body by every procreation, there is a sufficient reason for many varieties in the characters of children from the same parents, and no discernible limit to the possible complications of hereditary action.

It does not appear, and it is not likely, that any influence is received by the male from the female in an act of fruitful copulation which affects the children subsequently begotten by him. The circumstances, as regards him, are manifestly different; and although we may not accept the philosophy of the Hindoo code, it must be confessed that the part of the male appears to be an influence exercised and a force imparted, while that of the female is an influence received. The ancient code of the Hindoos regards the woman as the field and the male as the seed, and consequently assigns a much greater power to the action of the latter in propagation; for, it observes, whatever species of grain is cast into the prepared field at the suitable season, a plant of that species is always produced. But whatever be the relative influence of the two agents

* Some, it is true, have explained the fact by supposing that the imagination of the mother was dwelling, at the time of conception, on the former husband; but how could this improbable explanation apply to animals?

in generation, and there are contradictory theories upon the subject, it is plain that in the subsequent organic connection of the fœtus with the mother there is a reason why she should be affected by its nature which does not exist in the father's case. Close, however, as is the connection between a mother and her fœtus, it by no means affords an indisputable explanation of its influence upon her, or entitles us to assume such an influence in every case; for how does it happen that, notwithstanding the intimate connection between them, the fœtus may have the smallpox and the mother be free from it? Acquiescence in ignorance is the most praiseworthy course where, from a great deficiency of facts, all attempt at explanation must end in unfruitful hypothesis.

Having specified in the preceding observations certain conditions which are of consequence to an individual before the act of his generation is accomplished; having pointed out, in fact, how that his fate is in some degree being fashioned for him before he is fashioned, it now remains to indicate the circumstance in the sexual act itself which may appear to affect the result. The existing state of body and the existing state of mind in the individuals concerned will plainly be of some importance; but as the mental cause must operate indirectly by the induction of material conditions, it will not be desirable to attempt to consider them separately. Assuming the body, then, to be in a fair state of health and of natural development, what accidental circumstances, may interfere with the due discharge of its function? "The advice which I am about to give," says Plutarch, "is, indeed, no other than what hath been given by those who have undertaken this argument before me. You will ask me what is that? It is this, that no man keep company with his wife for issue sake but when he is sober, as not having before either drunk any wine, or, at least, not to such a quantity as to distemper him, for they usually prove wine-bibbers and drunkards whose parents begot them when they were drunk; wherefore Diogenes said to a stripling somewhat crack-brained and half-witted, 'Surely, young man, thy father begot thee when he was drunk?'" Therein has Plutarch signalled a cause of unsuccessful procreation, which, as he says, was known and treated of before his time, and which has been largely exemplified since. Instances are related in which a father who, while in the habit of going to bed drunk, has begotten children idiotic or otherwise afflicted, has, after throwing off his evil habits, had very healthy children; and it is said that a temperate man with many sound children has had one idiotic child, the plainly traceable effect of a single act of drunkenness during which it was begotten. In his excellent report on the 'Causes of Idiocy,' Dr. Howe declares that out of 359 congenital idiots no less than 99 were the children of habitual drunkards. No doubt, in some of the numerous cases which are recorded as examples of the effect of the

vice, the evidence is not quite conclusive ; but the important fact of the ill effect of drunkenness on offspring begotten during its existence issues with certainty from experience, and is indisputable. An act which is of a very intense nature, which makes a full demand upon the best energies of the organism, and which has most important consequences in determining the destiny of that which is to come, requires undisturbed and healthy bodily function. It was an opinion of Goethe that the custom of rejoicing and making festivity on the occasion of a marriage is not commendable, inasmuch as an important and uncertain journey is then about to be commenced, which should rightly be entered upon, as an uncertain voyage in life would be, with sober, earnest, and serious consideration. Joy and festivity should follow success ; and those who have well and helpfully borne the burden of existence together may, in the eventide of life, ere they lie down to rest, justly then rejoice with a sober gladness over the happily accomplished journey. The opinion may be an unwelcome one, but it has, perhaps, a stronger support even than the reason assigned for it. Those who enter on marriage are simply sealing their right to initiate the destinies of certain human beings, and to any but the most thoughtless of mortals it must surely be a fearful responsibility to be the means of introducing a single soul into this sin-laden earth. Marriage is plainly not a mere selfish affair of the present happiness of two individuals, but a solemn matter that concerns the future welfare of several individuals—a matter, therefore, for quiet accomplishment rather than for noisy demonstration. For it is a simple scientific truth that the nature of the offspring is in some degree influenced by the bodily condition of its parents at the time of its procreation.

The ill effect which alcohol is acknowledged to have on the product of the sexual act may be more or less plainly produced by other substances, such as opium and tobacco, which disturb the natural functions of the organism, and injuriously affect an act so exacting in its demands on the whole energy thereof. There is, indeed, reason to believe that any circumstance which causes a temporary or lasting degeneration of the individual will, to the extent of its evil, be injurious to the offspring. The fructification of plants is notably determinable to a certain extent by external conditions ; and that of animals cannot possibly escape the influence of the conditions under which it takes place. The degeneration of a race means the degeneration of the individuals forming it, and the degeneration of individuals is gradually accomplished by virtue of the law through which the acquired infirmities of the parent become the natural infirmities of the offspring. Though we may not accept in full the doctrine of Cardan when he says that if a man is over-full, dull, fearful, or perplexed in mind, his children will be much subject to madness and melancholy, we must, nevertheless, acknowledge a

substratum of truth beneath it, and respect the recognition of causality in the reason which he gives :—"For if the spirits of the brain be fuzzled or misaffected by any such means at such a time, their children will be fuzzled in the brain; they will be dull, heavy, timorous, discontented all their lives."

It has been before said that it is not possible to discriminate between the influence of mental conditions and that of bodily conditions on the product of the sexual act. In a legitimately accomplished sexual conjunction, where there is a deep, sincere, and virtuous affection between the agents, where love blends the minds as passion blends the bodies, there is a more complete unity of individual mind and body, a greater oneness of the organism, than exists at any other time. There is a great tension of the whole force of the organism, mental and physical, and in the discharge of the force a new individual is spiritually as well as physically begotten. But where there is dislike or aversion between the agents, where there is passionate sensuality on one side and indifference on the other, or where any other disturbing cause prevents the due co-operation of the mind, the act is reduced to an animal level, and it cannot justly be a cause of wonder if something little above an animal is generated. Kind produces its kind; animals generate animals; idiots are impotent, or incapable of procreation; lunatics beget idiots, as drunkards are liable to do; and the being who makes himself a temporary animal, idiot, or lunatic, cannot rightly expect to escape the law of their propagation. He will produce his kind. It is not sufficient that man be physically generated, he must be spiritually generated also. And whosoever, therefore, abandons himself in drunken excitement to propagation as an act of sensual gratification commits an unpardonable sin against the dignity of human nature, and generates consequences which no repentance can ever undo, and no remorse ever atone for.

An opinion is entertained by many that bastards are often remarkable for great ability, and many examples might be adduced to show that some of the greatest achievements in the world have been the work of those who were illegitimate. It is naturally assumed that the explanation of the fact is to be found in the passionate circumstances of the sexual act. Shakespeare, who gives his bastards great ability, gives that reason for it, for he makes Edmund thus speak :

"Why brand they us
With base? with baseness? bastardy? base, base?
Who in the lusty stealth of nature take
More composition and fierce quality
Than doth within a dull, stale, tired bed,
Go to the creating a whole tribe of fops?"

Cardan, Vanini, and other writers, have held a similar opinion; and

Vanini even goes so far as to exclaim thus: "O utinam! O utinam! extra legitimum ac connubialem thorum essem procreatus: ita enim progenitores mei in venerem incaluisent ardentius ac cumulativè affatimque generosa semina contulissent è quibus ego formæ blanditiem et elegantiam, robustas corporis vires, mentemque innubilem consecutus!"* On the other hand, Burdach thinks that the cause of the frequent vicious character of bastards lies in that which so greatly moves Vanini's enthusiasm. If it be admitted, however, that the great erotic tension in an illegitimate sexual act is likely to originate an energetic and stormy nature, it may be supposed that the circumstances in which he is afterwards placed will have much to do in determining whether the world shall have cause to applaud or to curse him. So that, if it be true, as Burdach assumes, that bastards are commonly vicious, a sufficient reason for the fact may exist in the unhappy circumstances in which they are generally placed, without appealing to the vice of the act in which they were unlawfully begotten. The world is not their friend, nor the world's laws; and when, like Edmund, they feel that their "dimensions are as well compact," their minds as generous, and their "shapes as true as honest madam's issue," it is not unnatural for them to rebel against customs which are established and laws which are made for the fortunate. When they are vicious and criminal, they are not generally feebly so; they are strikingly vicious and notable criminals.

It has been said, again, that the illegitimate become insane in greater numbers than the legitimate. It is easily conceivable; for when the mind is possessed with feelings which spring from the external circumstances, there cannot be that fulness of unity of it and the organism which has been declared to be necessary to the best propagation. Although the result may be genius when there is a complete self-abandonment and passionate union of the agents, it is possible that when there is not that complete forgetfulness of circumstances the result may be instability and madness. The fact, however, which comes forth, whatever the theories may be, is that genius, madness, and vice, are all three attributed in greater proportion to the illegitimate than to the legitimate. Now, it is a common observation that genius cannot at times be distinguished from madness, and that madness runs imperceptibly into vice, or vice into madness; that there is not, in point of fact, a single link wanting in the chain which binds the extreme of one with the extreme of another; and whilst it is still only conjecture that the cause of the greater frequency of their occurrence amongst those illegitimately born lies

* The reason for his wish he gives thus:—"Cujus mihi ratio ea videtur esse, quod omnia largè et effusè ex paternis lumbis ac visceribus sunt consecuti, nec in furtivo illo ac clandestino concubitu parcè, jejunè, tenuiter, sed affluenter naturæ numera illis infusa est. Cum enim uterque avidè," &c.

in the character of the sexual act, it would plainly be the vainest of all attempts to endeavour to point out those conditions in the act of combination which might be supposed to determine the different degrees of instability of the resulting compound.

Another observation which has been made is that there is a greater number of female than of male children amongst illegitimate births. Is the explanation of this also to be sought for in the circumstances of the act of generation? The much-discussed, but yet obscure, question, of the causes which determine the sex of the offspring, seems to have arrived at the probability that the sex is determined at the same time as life. Burdach has accumulated proof of this proposition, and his proofs may be shortly summed up under three divisions.—1. The time of the appearance of the sexual organs is, as Meckel, Rathké, and Müller have shown, nearer the time of fecundation, the higher the being is in the scale of organization. In vegetables the sexual organs do not appear till the plant is fully developed; in the invertebrata and in fishes only after the hatching of the egg; in birds they appear early, in the chicken, for example, at the fifteenth day; and in man they are seen at the end of the fifteenth week. 2. There are manifestations of sexual character independently of sexual organs. According to Soemmering, the sexes in the human embryo have visibly different forms, and the genital organs are, as it were, the local expression of the sexual character which is determined with life. 3. The facts of hereditary influence certainly favour the supposition. How, then, is the sex determined in the act of generation?

As one kind of being produces offspring of the same kind, and every kind reproduces its kind throughout nature, so there is a tendency on the part of every individual to produce himself; the male tendency will be to form a male, and the female tendency to form a female. There is, then, a sort of conflict in generation as to which element is to prevail, and the result of the struggle will be here, as everywhere else, to the strongest. The sex of the offspring will be determined by the greater energy of the sexual element in one of the germs by the combination of which it is formed. Thus the preponderance of female births amongst primiparæ is by some attributed to the great sexual force of the female which enters into the first conception; and Burdach thinks that a like preponderance of female births amongst polygamists is to be explained by the rareness of sexual conjunction with the female. Both these causes will serve to explain the preponderance of girls amongst natural children; they are mostly first births, and it is probable that connection has rarely taken place. Obviously, however, there may in such cases be another reason for the preponderating sexual force of the female, when the great erotic tension drives her to break through all conventional restraints and to rush passionately on an amorous

fate. On the other hand, the children of an old man and a vigorous woman are usually female, because age has diminished his sexual force, however great it might have been at one time. For it is evident that the sexual force of individuals will not only differ as a natural endowment, but that it will be subject to the variations produced by conditions of age and health, as well as to temporary exaltations and depressions from psychological and physiological causes.

With the law by which the sex of the offspring is determined, it seems probable that the law of the relative degree of transmission of the parental qualities to the offspring must be closely connected. The theories which asserted that the offspring received a certain part of its system from one parent, and a certain other part from the other parent, have been proved worthless. It is certain that every character, physical and moral, may be communicated at one time by the father and at another time by the mother, and may pass from mother to son, and from father to daughter. Moreover, there is not any certain connection between the inheritance of a characteristic of one parent and the inheritance of another characteristic of the same parent. Sir H. Holland, indeed, supposes that there is a general ratio between the resemblance of external features and that of internal parts of structure, but the supposition is not borne out by facts. A child may resemble its father in form and features, and not resemble him in internal structure and moral disposition; and the well-known instance of the cross between the dog and the wolf, in which one of the progeny resembled in disposition that one of the parents which it did not resemble in form, affords a striking example of the anomalies which may be met with in hereditary action. That which happens in the matter of colour when a European and a negro procreate may happen with any other characteristic, internal or external, and may be serviceable here as a helpful illustration. The usual result of the intercourse between a negro and a European is a mulatto, a being in whom the colours, so to speak, have been combined so as to produce an intermediate shade. But it sometimes happens that a child appears who is black with a white patch, or white with a black patch—pieballed, and the colours might then be said to be mixed, and not be combined. In one case, again, a negress had twins by a European; one was perfectly black, with short, woolly, curled hair; the other was light, with long hair. Here there was not even a mixture of the colours, but a simple repetition of them. In like manner it may be with any other parental characters. They may be simply repeated, so as to be plainly recognisable; or they may appear in a mixed form, so as to be partly recognisable; or they may be combined, so as not to be recognisable at all. But how it is that they are transmitted in such different ways, no man can say. That it is not the male or female nature which determines the character of the relative action of the father and mother

upon the offspring is at any rate certain. It may be, as some suppose, that the result is dependent upon the individual organic force of each parent, upon the relative potentiality of the germs, apart from the sexual character.* The proposition, which at first appears so vague as to be valueless, may, perhaps, merit some consideration when we call to mind another proposition, which is this, that an individual is a unity formed of the association of an infinite number of individualities, and the so-called individual force of the whole organism the sum of a multitude of individual forces, to each of which the first proposition, if true, must be applicable. Clearly, however, when we have thus descended to the individual cells, very little is at present to be gained by the motion.

Every consideration, however, which can be justly entertained on a very obscure matter tends to prove the great importance of the act of fecundation itself. Nature proclaims the time of its advent with all the beauty of her colouring and all the harmony of her sounds; the flowers are the dress of love, and the spring melodies of birds are love songs. There is a transport throughout the living kingdoms of nature; the temperature of the plant is increased, and it is arrayed in all its glory; the plumage of the bird becomes gayer, and its joyous excitement thrills forth in lively melody; the animal functions everywhere reach a certain state of exaltation, an ecstasy of love. A dose of arsenic which would kill a frog at any other time appears to be without effect upon it when it is copulating. And so much is the vital force exalted during the rut, that a stag which has been very seriously wounded is then capable of efforts which it would have been quite unequal to at another time after such injury. Some animals may be greatly mutilated during copulation without seemingly feeling the injury. The snail is then, according to Haller, insensible; and if the frog be then mutilated, it still holds to the female; nay, if its paws be cut off, seizes her again with its bloody stumps. This erotic transport does not exist only where there is a consciousness of it and all the joys and gains which flow from such consciousness, but it pervades the organism; there is a love-tension throughout. The experiments of Pflüger show that, when the connection between the brain and spinal cord is severed in the male frog during copulation, it still clings to the female, and even seizes her again after its leg has been dragged away from her. It is manifestly an attraction as natural and involuntary as that of one chemical element for another, or of positive for negative electricity.

Of what use, it has been asked, would the state of heat in the animal be if reproduction were complete without it? Of what use the erotic transport if it were no wise essential to proper fecunda-

* Dr. Lucas has most largely discussed this question, but his results in the way of definite knowledge, it will almost be needless to add, are *nil*.

tion? That it is essential may be inferred from the rareness of fecundation where coition does not take place under these circumstances. It is true that conception may take place during sleep, drunkenness, somnambulism, and syncope; but it is undoubtedly rare where there is not mutual self-abandonment. A forced copulation may be fertile amongst animals, but is by no means as certainly so as a voluntary one; and Parent-Duchatelet found only twenty-one infants born yearly out of 1000 prostitutes in Paris, the erotic transport being exceptional among them. Then, again, the degree of influence of the relative amount of the erotic orgasm of father and mother upon the offspring, which was admitted by Empedocles, Hippocrates, and Aristotle, and has been accepted by Hufeland, Spurzheim, Girou, Burdach, Lucas, and others, is decisive evidence as to its importance in successful generation. An absorption of the whole force of the organism in the act, amounting to an insensibility to surrounding objects, is evidently the normal state of the creature during fecundation.

Now, the intensity of the erotic orgasm, and the excellence, therefore, of the product thereof, will depend in a great degree on the mutual attraction which there is between the individuals concerned. Amongst animals, the female prefers the strongest male, for she looks quietly on until the battle for the possession of her person is ended, and then contentedly yields herself up to the victor. In that way the principle of natural selection takes effect, and the most vigorous procreation of the species is secured. It is said that a male which is deprived of its finest ornaments—a yellow-hammer, for example, with its tail-feathers pulled out—is rejected by the females; and Hunter observed that a bull would not copulate with a hermaphrodite cow although copulation was as practicable as with an ordinary cow. Nature seems to have opposed herself, again, to procreation between greatly different ages, by the aversion which there is to it among mankind, and by the difference of the time of rut at different ages amongst some animals. The rut of old stags, for example, is in the second half of September, while that of the middle-aged is in the first half of October and that of young stags towards the end of October. So it is effectually ordained that only those of nearly the same age can copulate. A similar difference in the time of heat has been observed in certain birds, as pheasants, and even in the time of spawning among certain fishes.* In man, however, other forces arise and overcome the aversion which nature has implanted in him to the copulation of haggard age and blooming youth. But the natural fact is not altered thereby—remains a reality, notwithstanding all the artificial motives which spring up in society to induce a neglect of it.

* Bloch, cited both by Burdach and Lucas.

When interest in place of affection makes a marriage, and when indifference or repulsion prevails instead of attraction, there is not that harmonious co-operation of all the circumstances which is essential to the best propagation. Accordingly, as good an author as Burdach maintains that the beauty and ugliness of children are not so much dependent on the beauty and ugliness of their parents as upon the love and aversion which these have for one another. And to this opinion Lucas heartily subscribes. Where interest and not love makes matches, as too often happens in civilisation, bad results, he says, ensue on the health, soul, and beauty of the offspring—those gifts of heaven and of life, which engender love, and are born of it. Instead of that beautiful attraction, that elective affinity, by which two beings are drawn together, and combine in marriage like two elements in nature, the passions engendered by civilisation supply other forces for binding together those who cannot be combined. Thus, the wealth passion binds withering age to vigorous youth, joyous health to pining disease, delicate refinement to sensual grossness; and this ugly, unhallowed union of antipathies, which all appliances of wealthy civilisation cannot render grateful to human feeling, cannot but have consequences in the inexorable logic of natural law.

Nature, it is evident, in the propagation of life, puts forth all her beauty, and provides the utmost gratification for all the senses with which man has been endowed for communion with her. To the eye she appeals in a magnificence of floral beauty which Solomon in all his glory could not equal; the sense of smell is gratified with the richest perfumes of her countless varieties of flowers; the ear is delighted with the multitudinous melodies with which heaven's vault is then filled; and the touch is intensified and exalted into a state in which individuality is lost, and conscious man for a moment blends with unconscious nature. As if tense with life, nature bursts forth in generation into all her beauties, and declares the joy of birth in all her most glorious manifestations. But man, unhappily, is ever striving to sever himself from nature, and to destroy the great unity of the whole. It was an Oriental idea, which Plato has allegorically expressed, that a complete being had in primeval times been divided into two halves, which were seeking to join together and to reconstitute the divided unity. The desire and pursuit of this unity is love; it is accomplished in the union of the sexes, and realised in the individual which results therefrom. Is it not manifestly of the greatest importance that the natural attraction of love should unite the right halves? Then that which is beautiful in nature will be beautiful also among mankind.

(To be continued.)

Practicable Mental Science. A scientific comparison of established views and recent developments in Psychology. By KENNETH McLEOD, A.M., M.D. Edin., Certified Student in Medical Psychology and Mental Diseases of the University of Edinburgh, and Assistant Medical Officer of the Durham County Asylum, Sedgefield.

Two recent numbers of the 'Journal of Mental Science' contain two communications, respectively entitled—

1. *On the Principles and Method of a practical Science of Mind.* By Dr. THOMAS LAYCOCK. (Journal, January, 1862.)
2. *On the practical use of Mental Science.* By Dr. J. STEPHENSON BUSHMAN. (Journal, April, 1862.)

These papers represent the deliberate and matured deliverance, in a more or less systematic form, of two scientific gentlemen, physicians and practical psychologists, upon a subject undoubtedly the most important that can occupy the minds of men.

The communications are in especial interesting to the Association, which has established the Journal for the very purpose of discussing such subjects, and whose members look to it for instruction and guidance in those matters which form the principal concern of their lives.

It is, then, a matter not only of intense interest, but of singular importance, to examine these papers severally and comparatively, and thus to ascertain if they coincide either in general principles or special details, what they express in common, and if they differ, which is most in accordance with reason and experience, and most worthy of acceptance as a guide and rule. Most of the readers of the Association Journal—and these include the most, and most assiduous and earnest and enlightened of British psychologists, and not a few continental alienists of note, all of whom take a most lively concern in this and allied topics—will have come to some decision upon the matter already, will have judged each and both according to acquired information and experience, and opinions formed thereon, and concluded as to their merit or demerit, their truth and trustworthiness as a guide, or the reverse. Still a systematic comparison of the papers of Drs. Laycock and Bushman, of what in them is peculiar to the writers or representative of a psychological school, cannot fail to produce benefit and lead to the development of truthful principles.

It has fallen to our lot, as an educational sequence in this department of knowledge—(1) to have obtained a thorough training in the Scotch school of philosophy and psychology, the school of Reid, Stewart and Hamilton, and to have eagerly imbibed and implicitly believed their tenets. (2) As the result of metaphysical thought upon a physiological subject, to have elaborated a teleological system, having in it many features in common with that of Dr. Laycock, before we became acquainted with his philosophy.* (3) To have learnt, as Dr. Laycock's class-assistant, from personal intercourse, from his lectures, his clinical instructions, and his books, the leading principles and *practical application* of his system. (4) To have, during the last twelve months, served in a county asylum where the practice has been active and experience considerable. We trust, therefore, that that amount of knowledge has been acquired, and that degree of mental and scientific discipline attained, which will warrant us in attempting an examination and comparison of the papers cited.

In pursuance of our design, we shall, after passing Dr. Laycock's and Dr. Bushnan's papers in review generally, come to close quarters with them, and, in as fair and accurate a way as possible, obtain from each an answer to the vital questions—

I. What is the *object* and design of each? What, in the expressed opinion of each, constitutes, or ought to constitute, "a practical science of mind"? *What*, according to each, have we to know, and seek to know, and where?

II. What is the *method* of each? What the principles, suggestions, instructions, which are intended to direct, assist, and control us in the attainment of a practical science of mind? *How* are we to know and seek to know—investigate—in order for practice or performance?

III. What *results* are exhibited by each of the practicability of their doctrines? Or how, when they are fairly and fully applied, brought face to face with nature and fact, do they stand the test, assist, or produce?

On looking generally at the papers under review, we find Dr. Laycock in the position of a defendant. His system of psychology, as set forth in his published works, a system containing in many essentials what is opposed to the established faith, and very much in addition to it, had been assailed by Dr. Bushnan, who, as the advocate of the philosophy of the schools, attempted to repel objections stated or implied to former belief and method, breaches of psychological canon, and to cripple the facts investigated and conclusions established according to the new method, thus acting at once the part of conservation and destruction—conservation of existing views

* An unpublished graduation thesis, entitled 'On the Homologies of Limbs.'

and beliefs, and unsparing destruction of aught not in conformity with these. Although Dr. Laycock's paper is defensive and controversial, rebutting the arguments and assaults of his opponent, still in it we have a concise and compact statement of his doctrines, set out more summarily and practically than in his book, and admirably available for instructing any one previously unacquainted with his peculiarities, forming, as it does, a digest of or index to his work, on which it rests, and with which it altogether coincides. The expository predominates over the controversial, and the communication is divided into distinct sections, devoted to the inculcating and illustrating of particular doctrines. Dr. Bushnan's paper is altogether expository, and the controversial does not at all appear in it. Still it stands in the controversy series, and seems to be a studied exposition and protest—an exposition after the prevailing fashion of practical writing, attempting to exhibit the practicability of dogmas and doctrines already in vogue, those which he was taught, and whose truth has been, until recently, unquestioned; a protest against the folly and futility of attempting anything different or in addition to what is already known and believed. Such a production is valuable, whether true or false. If true, then it does establish a strong presumption of the futility of anything besides or beyond; and if false, affords a most excellent ground for comparative examination such as we attempt.

The other papers of the series, those more purely controversial, will throw light upon doubtful assertions, especially the last. (Journal, July, 1862.) Before plunging *in medias res* we will first examine and compare the titles and general style and nomenclature of the papers.

I. THE TITLES are as follows:

"The practical *use* of mental science."

"The principles and *method* of a practical science of mind."

1. Dr. Bushnan's mode of entitling his communication represents a delusion as to the complete distinction between "the practical" and "the scientific," which appears very prominently in all his papers, and forms the subject of some of his hardest controversial hits. Further on in the same paper he speaks of "practical psychology, as *superadded* to scientific psychology" (p. 133). Still more explicitly he says, at p. 242, Journal, July, 1862, "What is the practical? With what does the practical deal? Does not the practical deal with individuals, while the scientific deals with species, genera, order, classes?"—as if species, &c., were not an expression of individuals, and could exist in generalisation or notion without or apart from individuals, unless we are to understand the passage as stating a new and fictitious realism. We have here a most complete differentiation of "the practical" and "the scientific;" a positive statement that "the practical" concerns one thing, and "the scientific" another.

Stranger still, Dr. Bushnan asserts that his two artificially differentiated and unified departments of knowledge have a different mode and principle of knowing, and a different means of investigation. We are, "in short, to seek 'the practical' in a direction opposite to generalisation" (p. 242). And, again, "Dr. Laycock affects to think that we teach that the inductive method is not the way to advancement in science" (p. 243), therefore that it is so in practice, which is distinct and different, and opposed in sphere, object and method—an accusation which he scouts. Then comes a climax:—"How sorry a figure will Dr. Laycock make if he resorts to such a defence as that practical improvement depends on scientific improvement; and if generalisation be the way to scientific improvement, therefore it is the way to practical improvement."

Finally—"There is *as little doubt* as to generalisation being the usual mode in which scientific improvement is made, as that deduction, or the method opposite to generalisation, is the principal means by which practical improvement is accomplished." Dr. Laycock has already, in a paragraph specially devoted to the subject, vindicated pointedly and unmistakeably the truth, which is a necessary axiom in all science whatever, and in the assertion of which "he makes such a sorry figure." Dr. Bushnan cannot resist its concise reality, although he disposes of it in two lines, but attempts to get out of his position by modifying the assertion which Dr. Laycock criticises, after quoting it *correctly*.

As Dr. Bushnan, whose statements avowedly represent *ideas*, not things, appears to us to misapprehend the real import of what science and practice are, and to be ignorant of their mutual dependencies and relations, we shall try, in all humility, to show what these are. He appears to entertain a mystic, misty notion of the one, and a rough, granitic conception of the other. Science, according to him, is a system of "pure abstractions;" practice, or "the practical," a rude contact with individuals. We will not, however, permit Dr. Bushnan the merit of singularity in this matter.

Aristotle says, "Science is conversant with things unalterable, necessary, and eternal; incapable of being generated, exempt from corruption; the knowledge of which admits not of degrees between total ignorance and absolute certainty." ('Ethics,' lib. vi, cap. 3.) Sir William Hamilton calls science "a complement of cognitions, having in point of form the character of logical perfection, and in point of matter the character of real truth." I might cite many other psychologists of the old school who define science similarly, and limit the term to the expression of what Ferrier denominates "the unchangeable (or permanent), necessary (or essential), universal (or common or general), in cognition." ('Institutes,' p. 153.) Metaphysical or ontological truth of the most general and abstract character.

Karslake puts the point most clearly. He says, "In science, *sciamus ut sciamus* ('the scientific'); in art, *sciamus ut producamus* ('the practical'). And therefore science and art may be said to be investigations of truth; but one—science—inquires for the sake of knowledge; the other—art—for the sake of production. And hence science is most concerned with the higher truths and art with the lower; and science never is engaged, as art is, in productive application. And the most perfect state of *science*, therefore, will be the most high and accurate inquiry; the perfection of art, the most apt and efficient system of rules; art always throwing itself into the form of rules." ('Aids to Logic,' b. i, p. 24.) This is exactly Dr. Bushnan's creed, though tamely expressed; for Dr. Bushnan does not admit the *sciamus* in "the practical," but "deduces" from the *sciamus* of "the scientific"—of higher truths—how and with what result we shall see.

Now, what is science? Simply knowledge—cognition—impression—presentation. It is the *incidence* in man's reflex existence. It is the experience of every vital change within us, in or by which we feel, think, or know (Laycock, 'Mind and Brain,' vol. ii, p. 81, § 447.) It includes every sensation, perception, act of attention, memory, reflection, conation, every state of consciousness of the individual during his whole existence, and the united experience of the race. Such is science, the entrance of which may be involuntary, systematised after its acquisition, or the result of a designed *conemur*, that we may systematically know. It is one and indivisible, and implies all the knowledge that man or mankind can obtain of himself or the external—all cognition.

It may, of course, be logically and truly divided according to its subject matter; and such the instinct and sense of man has led him to do. Thus, we have the science of abstract ontological truths—metaphysical ideas presented as intuitions in consciousness by the working brain; and we may establish these as a category, and call the collection and system necessary, intuitive, absolute, actual, &c. &c.; and the science of more special and particular modes of existence, which we categorise as contingent, accidental, variable, &c. &c.; and we may still further subdivide—and it is done to a very great extent—and single out as many sciences or ologies as there are attained or attainable facts of nature and creation. But the notion of calling ontological (metaphysical) truths—whether obtained by abstraction or generalisation from any fact or facts, or revealed in the consciousness of man as intuition—science, and that only, and asserting that the method of attaining such knowledge, and such only, is generalisation, is preposterous; while we are at the same time actually told that our knowledge of individuals—beings or things, we suppose, not actions—is not a part of science and "the scientific," the very name and perception of any individual being a generalisation, and though

an instinctive one, as truly one as the most abstract ontological truth. It is true enough that, before we arrive at any metaphysical or ontological fact, we must generalise, or *accept as a fact our cognition in consciousness of a generalisation, physiologically accomplished in and by the working brain, in virtue of its organization and action* (intuitions). Thus our principles of action and truths of existence (and we can know nought beyond facts of mode of existence) may be derived cognitively by generalisation from one object by successive abstractions, or from many by abstraction of what is common to all; or intuitionally attained, by the experience of the general principles (noetic, teleiotic ideas) of the organization and action of the working brain. But this we assert, as the foundation of all philosophy whatever—as that truth without which philosophy is a delusion and a falsity—that science is one, and its mode is one—observation, cognition, experience, incidence, presentation, and generalisation; that truths otherwise attainable by inductive comparison may in all degrees of abstraction become objects of cognition as intuitions, and in that degree of generality, and may be generalised to a higher degree; but that no truth of greater particularity can be obtained from the more general in any way whatever, but must be arrived at by direct cognition or generalisation from what is lower still. And we protest, in behalf of Bacon and his system, in behalf of science, its servants and votaries, against the fatal notion that “deduction (syllogistic logic), or the method opposite to generalisation, is the *principal means* by which practical improvement is accomplished.” Its use, at best, is speculative, designed, and systematic conation to science, but a process merely tentatively preparatory to the exercise of observation and generalisation, the only modes of attaining any knowledge whatever.

Dr. Laycock states, as the only other modes of knowing or pretending to know other than by observation and generalisation—1, mere practical tact or dexterity, without a distinct perception or knowledge of general laws and principles, commonly known as the “rule of thumb,” which science enlightens; and 2, the deductive or *à priori* method, by which principles are reached by logic instead of observation and research.

The first of these modes is an instructive, incomplete, and unsystematic observation and generalisation, such as *must of necessity* obtain in “the practical,” if *scientific* induction is eliminated as a mode of inquiry; and the second is that which Dr. Bushnan confessedly advocates, as the “principal means by which practical improvement is accomplished.”

Let us next ask what is practice, or “the practical?” It is nothing else than *action*—representation—expression—the *existence* of the unit man. It stands in this relation to science, that it is consciously or unconsciously *doing*, and science consciously or unconsciously

knowing; that the more and better (more systematically and truly) we know, the better we do, and that in *doing* we come to know, that is, learn by experience. That whereas knowledge may be instinctive or intuitive, so may practice or action; and that both in knowing and doing the *general principles* of knowing and doing are invariably instinctive and intuitive.

Now, whereas observation, comparison, abstraction, and generalisation, are the modes, and only modes of knowing; so design, force, and action, are the only modes of doing. Designing stands to doing in exactly the same relation as generalisation to knowing. They are *homologues*, principles of knowing and acting; the correlatives in cognition and representation of each other and of the teleiotic *ideas*, cosmic, biotic, and noetic, which they represent. Thus, in truth and reality, the scientific (knowing) and practical (doing) are not only different, but opposite; the one the incidence, the other the excidence, of the reflex action of conscious or unconscious man, who observes and generalises *quoad* the one, designs and acts *quoad* the other. This is the foremost and fundamental truth in the teleological psychology of the present day, which affirms intuitive or metaphysical ideas, not only in existence or cognition, but also in action.

But this is not Dr. Bushnan's belief or statement. If "practical use" and "mental science" were meant and applied in the way we have developed and stated, then the expressions would not only be correct, but excellent; but, as we shall see in examining the papers more minutely, "*mental science*" means with him a system of ontological laws, and obtained by empirical intuition, and "*practical use*" either a rule of thumb induction or the logical deduction of these laws. Dr. Bucknill, who is, we presume, a psychologist of the old school, represents our convictions on this subject very clearly when he says, "But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science (speculative science?), mental physiology and pathology, with their vast range of inquiry (induction) into insanity, education, crime, and all things which tend to preserve mental health or to produce mental disease, are not less questions of mental science in its practical, that is, in its sociological, point of view." (Journal, April, 1861, p. 138.) Our only objection to this sentence is that it does not, as Dr. Laycock does, recognise all science, metaphysical and practical, as available for practical as well as sociological use. A striking and true corollary to this proposition is, that any so-called scientific fact or system of facts, not available for practical and sociological use, is no science at all.

Dr. Bucknill's view and definition is a transition to another view, which is entertained by many men of eminence, viz., that meta-

physics is one thing and science another ; that science ought, as a definitive term, only to concern and express *facts* gained by induction—objective perception ; and that metaphysics, as a more or less speculative system, is truly not science. This view is perfectly correct if metaphysics include and express facts of the universal and absolute in existence, as different from the universal and absolute in cognition. The former may be the latter, but it may not ; and this presumption of contingency of our universal gives *pro tanto* a presumption of inaccuracy of facts of our universal when raised into the universal, unless it can be proved that the two coincide, which it cannot.

2. Dr. Laycock's title is logically more correct and certainly more promising of something useful to come. Practical is adjectively connected with science, without qualification or limit, implying, among other things—(a) That knowledge is logically necessary for performance, consciously, just as impression or incidence is necessary for expression or evidence. (b) That generalised systematic knowledge is necessary for any adapted performance. These two propositions involve the corresponding corollaries—that the more and more minutely we know, the more efficiently we perform ; and that the more complete our system of generalisation, the more safe and certain our performances. (c) That all science is one, and that its principles in cognition are the principles and causes of practical manifestation, adapted representation, production, construction, designed and adapted art, whether voluntary or involuntary, consciously adapted or reflex. (d) That not only is the science of the contingent and variable of the individual and its description, whether being, thing, or action, and the systematic knowledge of these by generalisation, necessary for practice, and the more minute and particular the knowledge (obtained, however, by induction, not logic) the more certain and excellent and useful the practice ; but that ontological and metaphysical facts which are repeated in consciousness as intuitional cognitions are the causal ideas in adapted manifestation, whether conscious or unconscious, voluntary or involuntary.

We have thus, in the expression which entitles this communication, an exposition of what a science, to practise, is and ought to be. What the paper professes to indicate is the principles and methods upon which the attainment of such a practical science rest.

II. The *style* and *nomenclature* of the productions under review are matter of interest and comment only in respect of the general law that the mode of arrangement and expression is a fair index of the philosophy (mode of thought) of the writer, and the reality and truth of the substance of the paper. Dr. Bushnan's paper is diffuse, immethodical, and does not exhibit an approach to logical arrangement or systematic inclusion. The production of a man well read in metaphysical and metaphysico-psychological *writing*, and

frequently exercised in thought upon such subjects, it has a show of learning, reads tolerably well, and has a specious but fallacious aspect of truth of assertion and grasp of subject; but on careful sifting, it is as barren, as a revelation of new fact—or elaboration of new principles—as such an amount of writing upon an important subject well could be.

The nomenclature is equally as metaphorical, mystical, beguiling, and impracticable. The word “man” occurs only about twelve times in this paper, which purports to concern his most intimate and important interests. Ignorance, defect, error, disease, insanity, crime, are hinted at or casually alluded to, or discussed in such a way as to mystify and confuse. Even life and its phenomena are sparingly touched on, and, instead of the being, his existence and its modes, his circumstances and their effect, his condition, errors, crimes, disease, &c., we have “the mind,” a term which occurs upwards of fifty times, unified as a substance and a principle, consciousness spoken of as a condition coexistent with sensation, &c. (p. 137)—a faculty to all intents and purposes—“states of mind,” “states of consciousness,” “outpourings, rushing in mad career,” and “currents of thought,” and—tell it not in Gath—“links in prevailing currents.”

On turning to Dr. Laycock’s paper we find a logical division, subdivision, and inclusion; no meandering beyond or out of the design of each particular paragraph, no intermixing or confusion. We are brought in contact with *things*, not ideas, and our understanding and senses, and both these as systematised in science, are constantly appealed to. There may be new doctrines hard to understand, but they are elucidated and illustrated. There may be new words difficult to comprehend, but we find them precise and definite, point to things, not ideas; and there may be new applications of old words, but we find these changes necessary to meet the requirements of wider generalisation and more systematic and established science. *Mind* is no more merely used to express the collective phenomena of consciousness as a unit, but is generalised into a force of the whole universe, wherever designed and adapted action exists, and is manifested by phenomena whose relation and correlation in time and space indicate a causal adaptiveness. It is thus made a subject of scientific investigation as a fact of mode of existence which was not before, besides being brought into CORRELATION *with all other coexisting phenomena*. “Necessary,” and its cognition in consciousness as intuition, are no longer merely properties of those cognitions which, as it were, fill the mind, and leave no room for contingency, but “necessary” is generalised into all existence, as an invariable expression of causal ideas and creative adaptiveness; and by intuitive truth is meant the cognition of a necessary idea, of such a general ontological fact that, as a law, it governs all occurrence in our universal and, therefore, must govern the physiological activity of

the brain. But not only does it exist as a dominant law of brain action, but of every other action as well, so that the same necessary truth which, as a necessary noetic idea is revealed (experienced) intuitively, in consciousness is also capable of being investigated and scientifically observed and stated in every other manifestation or phenomenon whatever. Now, with Dr. Bushnan, necessary and intuitive have the same significance as "the scientific," and he includes all these in his differentiated unity, "the mind," not recognising nor admitting the fact that "the mind," as manifestations or phenomena, must express or represent ontological and biological facts, in common with the rest of existence whose attribute is being or living. This is an excellent example of the truth of error, showing that Dr. Bushnan's brain works according to teleiotic, noetic ideas, ontological and biological law, *unifies*; but that his cognitions are both imperfect and inaccurate, and exhibits practically and concretely to all observers the nature and origin, *physiology* and causation of error. These prefatory remarks will render our comparison much more intelligible and useful, and now we shall take evidence upon the first question raised, and judge accordingly.

I. What is the object, ultimate aim, and design of each? What, in the expressed opinion of each, constitutes, or ought to constitute, a practical science of mind, &c.?

We shall first hear Dr. Bushnan in reply, and produce the following paragraphs from his paper in evidence.

1. "In the practical application of mental science, it is with individual character that we are for the most part engaged" (p. 132).

2. "In short, the chief practical use of mental science is to enable us to deal with and influence *individual minds*" (p. 133).

3. "Practical psychology might be described as the exercise of converting the general laws of suggestion laid down by metaphysicians into particular instances" (p. 134).

4. "It belongs to practical psychology to make an approach, at least, to anticipating such a train of thought as that just cited, when the prevailing *turn* of the *individual mind* has been indicated" (p. 135).

5. "To gain insight into the links of suggestion which are customary in individual minds" (p. 135).

6. "This particular department, the peculiarities of *mind in individuals*, is, in short, the practical part in psychology."

7. "The laws of suggestion, taken as a whole, carry us into the pith and marrow of practical psychology" (p. 139).

8. "It seems evident, from these and similar considerations, that what was termed above physiological psychology bears most on a practical psychology" (p. 152).

("Physiological psychology is the knowledge of the functions of

the animal kingdom, obtained through whatever channel may appear worthy of confidence"—p. 150.)

9. "It will be seen from the general tenor of the observations which I have offered in this paper that I regard a practical psychology as essentially the psychology of individual minds" (p. 152).

10. "Man, in short, is born endowed with certain susceptibilities, destined to be called forth under corresponding conditions; when these conditions arise, the predetermined result follows" (p. 151).

Here are ten paragraphs carefully extracted out of Dr. Bushnan's paper, all of which purport to answer our question, of what he intends to tell us and in what he means to instruct and guide us.

The first fact in their comparison which strikes us is their diversity; not only are they not expressions somewhat similar of the *same thing*, but they vary in the extent of what they include, and actually refer to things really and logically different.

It is curious also to observe that as the desultory discussion advances, mind and consciousness, subjective phenomena, and their kindred metaphysical phantoms, vanish; life, and its laws, peculiarities, and manifestations, are dimly seen through a misty clouding of metaphysical terms, and at last a single paragraph (No. 10 in our enumeration) coming immediately after the discussion of intuitive belief in personal identity and the existence of an external, solemnly in a tone of melancholy sadness, proclaims the essence of a teleological system of psychology, concedes the truth of *all* Dr. Laycock's doctrines, and is logically sufficient to overthrow every principle asserted in the rest of the paper. This transition is both interesting and instructive.

1. Phenomena of consciousness, peculiarities of mind, individual characters, &c.

2. Physiological states of living body, outrageous trains of thought, the result of material impulse on the nervous apparatus, &c.

3. Latent cerebration (*i. e.* mental action without consciousness, which attends upon every sensation, feeling, thought, emotion, passion, volition; in short, every state in which *the mind* can exist) confessedly abolishing consciousness and logically abolishing *the mind* as factors in cerebral activity; reflex cerebration, going further in the same direction.

4. MAN.—Born, endowed, conditions, predetermined results.

We have thus, in the wandering discourse of a man well informed as to the present and past aspects of psychological science, an epitome of the stages of progress of that science, from the pure phenomenal psychology of the ancients down to the most recent development in mental philosophy, namely, Dr. Laycock's teleological system.

No designed or systematic treatise could have done more simply or conclusively what Dr. Bushnan does involuntarily, namely, established the practical worth of the teleological mode of studying

mental phenomena. It is a most valuable tribute to Dr. Laycock, though unwarily rendered, and yields in one short sentence, standing singly and alone, all the recently controverted questions in favour of Dr. Laycock, his doctrines and gathering school, inasmuch as it not only concedes but affirms the fundamental truth of his system.

But the very next paragraph leads us back to No. 8, and that immediately succeeding conveys us to our impracticable starting-point—the author's professed belief and statement of the scope of a practical science of mind; consciousness studied singly in individuals and comparatively in the race, or, rather, the generalities and peculiarities of the mind as evidenced in consciousness. Dr. Bushnan here exhibits the essence of error, excessive or absolute unification. He unifies "*the mind*" as a special object of investigation, and consciousness as a special mode of investigating; and not only is his unification excessive, but it is absolute. The mind is unified out of relation with all known or knowable phenomena whatever, and consciousness is singled out as a mode of obtaining knowledge, different and distinct from all other modes whatever. We have a speciality in its grossest form, and its logical consequence is apparent in the necessary statement of "*the mind*" as a principle and substance, and the proclamation of a duality professedly material and immaterial, but really and truly, in nomenclature, expression, and logical significance, doubly material. Restrained within these limits even if induction, observation and generalisation were Dr. Bushnan's instrument of knowing in this matter, he must necessarily restrict himself to consciousness, according to his definition of it, admit all the evidence which it affords, and exclude all that consciousness does not and cannot reveal; for mental activity, according to his principles, can only be evidenced by consciousness, and any phenomenon whatever not so attested cannot be a phenomenon of "*the mind*." Without arguing the matter further, we strongly state—1. That what Dr. Bushnan proposes for investigation is not an existence, viz., "*the mind*," which even with the more enlightened of old psychologists, is "*the consciousness*." Both are an evidence, are one and the same thing, may coexist with the activity of every fragment of man's nervous system or may not, and at best evidence effects without giving the slightest information of causes, or causes without being able to register effects. Thus, Dr. Bushnan proposes to make an entity of an evidence, to take evidence of the states of the entity by the fictitious entity itself under another name. This cannot fail to end in confusion and error. 2. That if Dr. Bushnan energises at all in the way of scientific discovery, or for the sake of practical science, he must totally and entirely throw aside his principles, and in act adopt others which we shall immediately note. This we shall find Dr. Bushnan constantly and invariably doing. Far be it from us to depreciate the value of the information which we obtain concerning what happens within us

in all relations and conditions and states of our body, *when such can be obtained* (for in many active conditions and states it cannot); but we assert its nature and functions as experience or cognition, and its unity as an informant of vital states, whatever they are, and however caused. Consciousness cannot become an object of scientific inquiry. We can only say of it that it exists as a unity, correlative with the unity man. It is only the contents of consciousness as particular acts that we can know and compare, and these, as they are real existences—changes—are known and believed as facts, in what way whatever the changes arise. In consciousness, we may thus have facts, cosmic, biotic, or noetic existences or actions, and if it is the facts of consciousness thus defined and generalised that are to constitute science, then there can be no disputing that absolutely nothing remains to be desired; but we are limited to the cognisance of *noetic facts*, experiences of cerebration, the modes of association, combination, sequence, &c., of cognitions, of cosmic and biotic facts.

Taken, as it truly is, as a cognition of brain action, whether normal or the reverse, how, in the name of reason and common sense, not to say philosophy and science, can we hence derive facts as to the circumstances under which normal cerebration takes place, or which exalt, confirm, or subvert the mental operations?

If Dr. Bushnan asserts that consciousness only reveals states of "the mind," and that in psychological investigation these states and their succession and relation are the only facts which can constitute the science, or can avail for practical use, then we say, as we trust we have shown, that he labours under a fundamental fallacy, and that the more he systematises and writes on such a foundation the deeper he plunges into confusion and error, and the further he departs from what is feasible and practicable.

If Dr. Bushnan concedes that thought *cannot* take place apart from brain, and grants us that, practically, the knowledge of its conditions and of the vital changes which take place in it, in association with particular "states of mind," is all important in order to influence individual minds, in whatever state, and more especially in a state of disease, how can he, in consciousness, as concerning and containing a particular and different kind and order of facts, and that only, attain to the knowledge of the causes which affect the brain, the state of the brain itself, facts which in order precede the facts to whose cognisance he limits us? Indeed, in consciousness, as he defines it, we could not obtain a knowledge of the existence of a brain at all.

Finally, if Dr. Bushnan yields us that, not only the state of the brain, but the condition of the living body, its nutrition, its vital energy, and the right performance of the functions of the various organs, and, as a matter of course, the conditions which cause the condition of the body, as not only coinciding with but causing

certain felt and manifested states of mind and temper, how, in the knowledge of the laws of suggestion, and "the peculiarities of individual minds," are we to know anything at all of cause, proximate or remote, of normal or diseased action; and if we know nothing of the causes, how can we prevent or modify their action and occurrence, so as to influence individual minds or masses of individual "minds."

A practical science of mind must include not only a knowledge of "particular states of mind of individuals," but a knowledge of every state of brain, body, or nature generally, coincident with, or every action and occurrence of each and all causal of, any experienced or manifested "state of mind;" and even then the "state of mind" is but the cognition of a certain mode of existence teleologically conditioned and caused.

Let us now turn to Dr. Laycock's paper. He tells us at the outset that his object is "to determine how far a mental science, in the true meaning of the term science, is possible and capable of practical application to mental pathology, therapeutic, and hygiene, and the needs of society in general." We are here at once introduced to something actual and existing; man's mental imperfections, his diseases, errors, crimes, and tendencies thereto, are made the subject of investigation, and the means which prevent their occurrence, obviate the tendency, or correct the morbid manifestations. "Living man," as he exists on earth, is made the subject of scientific investigation, and not even as a separate unity, but as existing and acting in subjection to the general laws and conditions of the universe and the particular conditions of his existence; and the nervous system and brain of man is investigated as organized and active under these laws, and under the physiological laws of the organism, possessing thus the general properties of all substance, the special properties of living substance, and the still more special endowments of co-ordinating (physiologically abstracting and generalising) nervous substance.

Consciousness is considered as a unity, correlative with man's existence in space and time, is taken as a fact of man's existence, as a being perfectly incapable of being defined, so that the question what is consciousness or what is the mind cannot become a scientific concern.

Now, as all these conditions—cosmic, biotic—are causes in the development, organization, and vital activity of the human being, it follows that no science of him can be complete without a knowledge of these, nor of any vital state of any part of him, nor of any coincident state of consciousness.

And as his normal state demands an amount of knowing so at once minute and comprehensive, *à fortiori* his abnormal states, which can only be remedied when these conditions and causes have been thoroughly explored. "In short, the science must be complete in its scope," must involve everything out of man that has a relation to him,

and everything in man that has a relation to his brain, can influence its state, and consequently modify the state of consciousness.

To bring the matter to an issue, Dr. Bushnan limits our investigations to "states of consciousness," "peculiarities of mind," and unifies this field of research into absolute peculiarity in existence in every possible respect.

Dr. Laycock declares for an unlimited scope, a complete science, which must be etiological if it is to be of the slightest practical value whatever. The crowning merit of his system is that it puts mental phenomena in exactly the same conditions for etiological investigation as any and every other science, unifying all science as the correlative of existence, and cognition as the correlative of both; stating the profound truth that man is cognisant of himself scientifically in exactly the same way that he is cognisant of every other created thing; extracting mind and ontological facts out of consciousness and cognition, and asserting for both their existence in the universe of action.

II. Dr. Laycock and Dr. Bushnan's notion of what a practical science ought to be, where the facts which constitute it are to be obtained, being so diverse, it devolves upon us next to examine how each proceeds to develop a practical science. Dr. Bushnan, true to his fundamental notion, asks, "How, then, are we to proceed to gain insight into the links of suggestion which are customary in individual minds?" (p. 135); postulates a previous acquaintance with all that "scientific psychology teaches us concerning the nature of human feelings, thoughts, emotions, and passions and proceeds to enumerate, as the most obvious means of penetrating into the "recesses of thought," as follows:

1. A careful scrutiny of the characters of others.
2. The study of systems of scientific psychology which generalise mental facts metaphysically.
3. The influence of physiological conditions of the human body in modifying trains of thought.
4. The study of the products of mental activity, man's writing and acts, and imaginative or real records of what man has done and said.

We shall, without reserve, concede to Dr. Bushnan that facts of the kind thus classified are all more or less important as manifestations of mental activity; but we submit—

1. That they are not all admissible on his principles.
2. That after they are attained, they are of no use whatever, according to his method. Even when read and interpreted according to the broad philosophy which demands an etiological science upon teleological principles for practical use, they fall short of such a completeness as to render them available for practice; but when cramped in the fictitious unity which Dr. Bushnan creates for them,

they are utterly delusive as a science and void of use for practice. The only division which at all savours of the feasible is the third, which appears to be rather a concession to present scientific developments than a segment of the legitimate science of psychology according to the author. Let us, however, in order to test his system more minutely, take his divisions into consideration *seriatim*.

1. His first division concerns the careful scrutiny of character. This, even in ordinary parlance, means a considerable amount of information beyond what Dr. Bushnan postulates in a hypothetical impossibility, which would, on his principles, make his science complete. It means a knowledge of the man, not only what may be called his mental generalities and peculiarities, his modes of thought, as manifested in speech, action, writing, behaviour, &c., but his morphological peculiarities, his size, height, temperament, physiognomy, &c., and his physiological peculiarities, rate and kind of motion, gesture, talk. The manifestations of what are purely physical and physiological are as much part of the estimated character as the modes in which thoughts are "accustomed to array themselves." This much the common sense and instinct of mankind have led him to; but when systematised in science, the "character" of a man means an exact and well-taken statement of the peculiarities of his body, its action, as well as the peculiarities of his mental manifestations. A careful register of every such particular constitutes the "case" of an individual; and each well-observed "case" constitutes an instance of the coincidence of certain conditions, morphological, physiological, and psychological, an induction for the sake of comparison with other similar inductions, and generalisation therefrom, generals of all degrees bring deducible from everyone, either physiological or ontological, or from the comparison of several and all. Now, this or such as this is, in our humble apprehension, what constitutes one of the modes of attaining to a science for practice; and as this is our belief, so it is our practice. Every "case," therefore, which it becomes our duty to record is made the subject of induction, according to a fixed mode; coincident facts, morphological, physiological, pathological, and psychological, being stated in as clear and orderly a manner as possible. Any "case" not possessing all the information possibly attainable is in that degree imperfect, and it is a complete and systematic knowledge of coincident phenomena, the preceding and succeeding sequences, the causation and results, and only that, that can enable us to diagnose or prognose, as it is, a complete and thorough knowledge of agencies causing other sequences and coincidences of phenomena in such and such circumstances, and that only that can enable us to treat. Such is the familiar mode of amassing a science for practice, and the results of induction, more or less elaborate, conducted in this way; and according to the care of the conducting and the comprehensive-

ness and minuteness of the induction, the results are more valuable, appear from time to time in our records, and such, we have no doubt, is Dr. Bushnan's own invariable habit. Still, in his efforts to reconcile a delusive and false philosophy with actual occurrence and the needs of mankind, what absurdities does he fall into and enunciate! As the beau ideal of knowledge of character, as the utmost possible amount of psychological attainment, he asks for a minute of all the operation of a man's "mental nature," from the earliest period of consciousness—a considerable time, probably, before birth—down to the last consciousness which precedes death, and warms in the contemplation of the amount of knowledge which might be derived from "sets of pictures of this kind." Even if such pictures were attainable, and, if attainable, capable of expression, could the consciousness of the states and modifications of man's "mental nature" give us the slightest clue whatever to their mode of production, or subserve any practical purposes whatever? As revealed facts of man's "mental nature," they stand absolute; there is nothing to connect them with each other or with facts of any other sort except their sequence; and dissociated from the rest of man's nature, or nature at large, in condition and causation, they cannot form the subject of comparison of any sort; may, as phenomena of man, be interesting to poets, moralists, and so-called philosophers, but cannot be of the slightest service whatever to legislators, lawyers, or physicians, or any who have to deal with man, his existence as a unit in creation, whose laws condition him, his actions and reactions.

Dr. Bushnan cannot admit the contenta of consciousness *in toto* as facts of his science, for this goes beyond the bounds of his science—involves objective perception, includes morphological and physiological psychology, which he repudiates as at all constituting or forming a part of pure science. According to our belief and Dr. Laycock's principles, he thus logically reduces his science to an absolute nullity, for with us consciousness is one, as a state of knowing, is not an object of science itself, the only truth concerning it being that it exists. Its contenta constitute truths of science which would be absolutely perfect if consciousness contained all the facts of creation, past, present, and future, in their actual relation. It is towards this that conscious action and conscious conation points. It is towards this that the brain teleiotically ideates; and if such an amount of knowledge were possible, "the mind" would be simply an existence, a unity in which activity as to anything beyond would be absolutely an impossibility. The existence comprehending would, however, be absolute, have no relativity in time or space, and, as an existence, would be the cause of all activities within, subunities having a sequence in time and coexistence in space. This, indeed, constitutes the scientific notion of God—designing, creating, and upholding. Here meet the greatest cognition and the greatest

power—absolute science and absolute causation. Here rest the causal ideas of existence—in system and inclusion. THIS IS MIND. We have perfect and absolute in this existence what we have derivative, limited, and relative in every other, organized and disorganized. How, then, does Dr. Bushnan attain a science at all? He takes, admitting facts of a certain sort, an arbitrary section of the contents of consciousness, and predicates of them that unity of existence which belongs to all, and that absolute causation which obtains in the universe. In concluding our remarks upon this section we suggest to Dr. Bushnan and his associates in belief and attempted practice on it—

1. That the fact of relation to the external, and the fact of impression by the external and reaction on the external, must constitute the first and most simple elementary, essential state of consciousness—acts of cognition; so that, generalised to the utmost, adult consciousness is identical with what we have every reason to suppose the first consciousness of the individual is, namely, impression from the spermatozoid. This generalisation establishes the unity of consciousness and cognition, the universal scope of science, and the absurdity of artificially cramping it within the limits of a delusive unity.

2. That every fact of consciousness has a causal origin in the external; and—

3. If we admitted the cognitional distinction between consciousness and external perception and the unity of the “substance and principle” mind, as revealed in consciousness; and if we were asked whether we should take for practical purposes the intuitions of consciousness, as revealing “the mind,” or the fact of man as an object, his states and manifestations as ascertained by our senses and external perception generally, either to the exclusion of the other, we should unhesitatingly declare for the latter, and obtain, in the amount and kind of facts admitted and mode of investigating, all that Dr. Bushnan or any other practical physician at present demands for the uses of practice.

II. Having dwelt so long upon Dr. Bushnan’s first head of discourse, we can dispose of the rest in shorter space. The statement which formed the subject of our comments is followed by a reiteration of the propositions—Practical psychology consists in the study of individual minds; the study of individual minds constitutes psychology. And nothing very remarkable occurs until we arrive at the following sentence:—“Since it has been generally taught that consciousness is not a separate faculty of the mind, but a *condition attendant* upon every sensation, feeling, thought, emotion, passion, volition—in short, upon every state in which the mind can exist—the unity of the substance mind is at once made apparent to the student” (p. 137). This is most illustrative of Dr. Bushnan’s system. This makes the consciousness one

thing, the sensation, &c., another. If it does not constitute a faculty, what does? And then we are told that the substance mind is thus made apparent. Here, so far from a unity, it is not only a duality, but a trinity :—1. Substance mind, and its states. 2. Consciousness, and its states. 3. Body, organs, and life, constituting the third member of triune man. Is the sensation, feeling, thought, emotion, &c., not a state of mind and consciousness of the conscious man, whatever he is conscious of at any one moment? Are not memory, judgment, imagination, &c., states of consciousness as well? Does not all mean the man, or the man's brain? Are they not all cerebration in cognition, the process intervening between presentation and representation, impression and expression, the mode of reaction of the conscious man, the concrete *ego*?

Of the systems of philosophy recommended to our study, Dr. Thomas Brown's is held up to us as the most profitable for practical purposes. We have no wish to disparage the labours or opinions of Dr. Thomas Brown, nor of his admirer. We have read his books, and been charmed with his acuteness, his method, and his eloquence, and we have found throughout his work traces of the inductive and practical. It is not the latter, however, that Dr. Bushnan gathers and recommends for study; it is his laws of suggestion relatively in cognitions, his systematic statement and exhibition of the most abstracted facts in mental phenomenology, of metaphysical peculiarities—the most general modes of conscious cerebration—the relation to each other of the contents of consciousness in sequential development. His laws of occurrence are the laws, not only of the occurrence of cerebral changes to ends known in consciousness, but the laws of general occurrence, the most general, universal, ontological facts, involving such facts and cognitions as unity, unities, inclusion and succession in space and time, &c. These, as they are the most general modes of existence, exist in cognition, as intuitional experiences and beliefs, and, as such, form the most general and teleological laws of cerebration, constituting the most general principles of science generally and of mental science particularly, causal ideas, intuitional, cognitions, necessary truths. But how will this knowledge—excellent, useful, indispensable in its place and degree, an important part of practical science—avail alone for practice, in influencing the actions and habits of, not individual minds, but individual men and masses of them? Dr. Bushnan cannot, on his principles and method, get beyond them. He recommends a noting of particular kinds of cognitions already referred to, and abstracting or generalising them to the degree of comprehension of the laws of suggestion. Thus—

1. He can never get beyond the generals, unless he abandons his mode.

2. Even here he practises “induction, observation, and gene-

ralisation," and calls it "deduction, or the method opposed to induction."

3. His mode is faulty, vitiated by the fundamental defects before enumerated.

4. There is nothing here practical or practicable.

III. The next section starts with the following sequence of propositions :

1. "The laws of suggestion, as a whole, carry us into the pith and marrow of practical psychology." We have shown that they, according to his method, do not.

2. "Man has no voluntary power over any one thought, but may, by the regulation of volition and desire, become in a great measure master of his thoughts—overrule and control the ordinary rules of suggestion." A palpable contradiction.

3. "Organic states of the living frame sometimes assume the mastery." Our creed is that consciousness is a perpetual induction of the organic states of the living frame. The obscurity, confusion, and contradiction of these paragraphs require no notice.

Then comes a statement the most scientifically audacious which we have ever read. He says, in measured terms, that "every act of mind leaves behind it in the vesicular substance a material trace or vestige, which may be organically affected and rendered active." That is bad enough. But he says, further, that his vestige is to concur with the *mental principle* in reproducing a previous state of mind. Here are three distinct hypotheses :—1. Material vestiges as remnants of thought. 2. Mental principle. 3. Reproduction of *previous* states of mind. How are intoxication, dreaming, insanity, &c., to be explained? By a fourth, that an increased momentum of blood renders active the vestiges by a merely physical impulse. Thus, "an outpouring of disjointed thought may occur;" "thoughts may rush onwards in mad career;" "torrents of unconnected ideas may be uninterruptedly poured forth."

We shall not permit ourselves to criticise this statement, and merely adduce it without remark.—(1) for the purpose of exhibiting to what melancholy extremes a fundamental vice in philosophy, principles, and method, will lead; (2) in order to compare it with a passage in a reply to Dr. Laycock (*Journal*, July, 1862, p. 239). Here he states that "the belief in the external world is not a truth of experience," having admitted shortly before "that consciousness is an experience of the vital changes within us." He imagines Dr. Laycock dreaming, and says "the dream is as much the reality of a succession of states of consciousness as the reality it represents would have been"—viz., the reality of objective cognition. These statements suggest several remarks.

1. Both are states of consciousness, and believed as such; one in relation, the second out of relation.

2. Both are cerebral occurrences, known and believed as such ; the one in relation, and the other out of relation.

3. Every cerebral occurrence, every state of consciousness, is a fact, and known and believed as a fact, the most particular and contingent as well as the most general and absolute, until further experience disproves it.

4. Dr. Bushnan, by means of the vestige hypothesis, is suicidal, for he admits, in the subsequent dream, of something additional to "the mind," which formerly constituted the act of experience and which now must do so equally.

Without pursuing our investigation of Dr. Bushnan's paper further, for it becomes as it progresses more and more confused and impracticable, we have adduced sufficient evidence—

1. To exhibit his mode of elaborating a practical science !

2. To prove how utterly out of keeping with any other scientific investigation what he recommends us is, and how neither science can be added to nor practice improved on his principles, but the one impaired and the other embarrassed.

Let us next ask shortly what mode of investigation Dr. Laycock recommends—what are his "principles and methods" ?

1. He unifies science, and makes it coextensive with existence. Psychology is with him but a subsection of the science of universal existence, a knowledge of a special mode of existence, whose general conditions and laws are the conditions and laws of every other mode of existence.

2. He unifies consciousness as cognition of organic states teleologically caused. These two propositions contain the essence of his system, and all the particular truths of his philosophy are but sub-truths of these.

3. He admits not, as Dr. Bushnan does, a science of mind distinct and separate from every other, having a different subject matter and mode, facts and laws.

4. Neither does he admit, as Dr. Bushnan does, "that the evidence of intuition and the evidence of experience are wholly separate and distinct," but "brings intuition, *as a fact of experience*, into the sphere of science for practice." And intuitive truth is with him an experience of the operation of an ontological law, the correlative in cognition of a teleiotic idea in creation. Intuition and every intuition is with him experience, the greater (experience) including the lesser (intuition).

5. Every act of experience is with him a truth, inasmuch as it is the cognition of an actual occurrence or change. Error and delusion, hallucination, &c., are as much facts as truths of number and form, and, as facts of induction, capable of being compared and dealt with generally as any other facts, so as to investigate and ascertain the causation of the ateleiotic state, and the relations of it to actual existence.

6. Necessary truths obtained by the experience of intuition are, in reality, facts of induction, and have their quality of necessity in their universality, actually and causally. They are fundamental ontological facts, constantly and invariably dominant and existent in creation and cognition, in brain and mind. As facts of cognition, truths of induction, they become a part of science to practise, fundamental conditions of volitional designs to ends. But any fact whatever, if known in all its true relations in time and space, is as truly and necessarily known as an abstract intuitional fact, and any fact whatever, whether known in any relation or in any real existing relation, is also as much known as a fact as arithmetical or mathematical truth. Thus, the dream fact adduced by Dr. Bushnan is no less a brain fact than if it constituted a waking experience or a waking memory, and as a dream fact it stands as a fact of induction for comparative investigation as to its causation, relations, &c.

We need hardly point out that the radical distinction postulated between the truth of the forty-seventh proposition of the first book of Euclid and the truth that water boils at 212° Fahr. is a verbal quibble. The one is an intuitional experience of a universal, formal truth, and the other is an experience of a truth as necessary in existence and occurrence as the other, which would be as necessary in expression if all the actual causation and relation were stated.

6. Dr. Laycock lastly abolishes the notion of mind being an absolute unity in every man, causing the manifestations of consciousness and representation, and states it as a causal unity in creation, as an active agent whose manifestations can be everywhere inductively traced. He thus opens the way to a field of science never trod before, and obliterates the hackneyed circling delusions hedged in formerly by an impenetrable barrier, so that from mind science one could not travel to any other, nor from any or every other science to mind. Now, mind science is universal, and "the mind" science in relation with every other, so that every other science reflects light and enlightenment upon it, and it upon every other. They are all manifestations of causal mind, are the cognition and induction of it; and while every fact of cognition gives a power for practice in mental science, every fact of intuition gives a power for practice to every other science. Cognition and intuition are one and the same; science, mental and physical, is one and the same; and practice, the existence of science, the incidence, is one and the same.

In concluding this section of our comparative review we shall merely—

1. State as the merit, the attraction, and originality of Dr. Laycock's elaboration, that it establishes, without barrier or limit, the universal sphere of an inductive mental science, a purely inductive science, affording scope for the earnest labours of workers in all departments of science to bring their results into relation, and

holding out an illimitable field for inductive research, while investigation is directed by the fundamental principles. The more work that is done in this way, the more will "the practical" gain in certainty and success; work on any other foundation is useless and embarrassing, and work ostensibly on any other foundation is really instinctively and intuitively on this. Dr. Laycock has raised instinct and intuition out of unconscious forgetfulness into cognition, science, and system.

2. We make a strong counter-assertion to Dr. Bushnan's gratuitous accusation, that Dr. Laycock "continually abuses the psychology of the schools," "sneers at Locke and Leibnitz as being pretenders." Never have we, in intercourse with Dr. Laycock, from his lectures or his writings, experienced the slightest foundation for such an unfounded charge. "Sneering and abuse" are neither Dr. Laycock's philosophical tone nor his habit; and if he investigates new facts inconsistent with former tenets, or elaborates new principles in opposition to them, or, in a solid, dignified way, refutes fallacies of former assertion and method, unfounded personalities will not avail against the conclusion.

There still remains for performance the third and most important portion of our purpose, the testing of the philosophy of each by actual occurrence. This will form the subject of a future communication, when we shall inductively examine the results in experience and practice of the methods inculcated by Dr. Bushnan and Dr. Laycock.

Personal Identity, and its Morbid Modifications. By J. CRICHTON BROWNE, M.D. Edin., L.R.C.S.E.; Ext. Mem., late Senior President, Royal Medical Society, Edinburgh; Assistant-Physician Derby County Asylum.

(Concluded from p. 295.)

At the close of our last paper on personal identity we had just turned to the consideration of those apparent morbid divisions of the unity of consciousness which are sometimes, though happily rarely, brought under the notice of medical psychologists. Double consciousness, as we have already hinted, is essentially a result of diseased action, and comprehends a variety of conditions, distinguished from each other by differences in the mental symptoms, and by the relations to each other of the lucid and insane or of the two insane "oscillations." In all of them, however, there is, for the time, a change, a perversion, or an exaltation, of the mental identity of the individual, of

that principle which is, as it were, a centre round which the other faculties of mind revolve, and about which memories cluster. In the intensest forms of double consciousness, so called, mental identity is separated or multiplied into two distinct parts, so that two identities reside in the same individual, while in the milder manifestations of this condition there is a partial division of the same principle, a confusion of two natures in the same person. Where two alternating, though altogether unconnected, lives are lived by the same being, there is afforded, we think, a proof that mental identity is something more than consciousness, and so far independent in its affections. Indeed, it appears to us that the morbid states at present under examination would have been more aptly described as instances of double identity rather than of double consciousness. The phrase double consciousness is a contradiction in terms, for it is manifestly absurd to suppose that the mind can exist in two different states at the same moment. It is also a misleading expression, for this is not, of course, the meaning which it is intended to convey, nor is it at all descriptive of the conditions to which it is applied. These conditions are not necessarily characterised by any alteration of consciousness; that is to say, if consciousness is regarded as having reference simply to the present existing operation of the mind, for the man who inhabits alternately two distinct mental spheres may be perfectly conscious in both of them. In both of them his eyes, his ears, and all his organs of sense, may be normally active. In both of them, with equal accuracy, he may appreciate his surroundings, govern his movements, and express his ideas. In both of them he may be equally conscious, but he is not *similarly* conscious. The same world is inspected from different points of view in each. In the one it may be the real world, as it is to the perceptions of ordinary people; in the other, the world clad in the unsubstantial figments of a feverish fancy; or in both, a shadowy world, made up of metamorphosed realities. But whatever the metamorphoses may be, they arise, not from errors of perception, but of the personality—perceiving. A man who has passed into the abnormal phase of double consciousness sees all the familiar faces that surround him, but he does not recognise them; he hears loved and well-known voices, but they fall upon his ears as strange sounds; he beholds his household gods, but these do not, as they were wont, awaken emotion in his mind; in short, he regards everything in a new light and apart from former associations. The mind, shorn of its past, begins to learn the lessons of life anew, and perceives every object in relation to its new condition, the result of internal changes. The outward creation becomes subordinate to the inward idea, and is regarded only as it harmonises with the reigning delusion.

But the distinction between the two phases of double consciousness does not merely consist in the failure of memory, in the absence of

remembrances of the past, either singly or in their relations. An American author, distinguished alike for the subtlety and beauty of his thoughts, has made identity altogether a matter of memory. He has said, "It is by very little things that we know ourselves. A soul would very probably mistake itself for another, when once disembodied, were it not for individual experiences that differed from those of others, only in details seemingly trifling." Without speculating as to what shall eventuate in the unknown future, in that day when soul shall meet soul, "without the clay between," we may safely assert that, in the sense in which the word is here used, identity has little or nothing to do with experiences. Apart altogether from the experiences here referred to, minds cannot be regarded as resembling each other as much as do the waves of the ocean, and as having as little individuality as these. Minds are not projected upon the earth as from a machine of a fixed pattern, according to contract. They cannot be regarded as masses of clay left to be moulded in the hands of time. The identity of a mind does not depend upon the result of any such moulding, nor does this fundamental belief grow, and develop, and increase, according to the number of experiences, with all their trifling accessory circumstances, through which the mind has passed. A man of mature years and intellect and of vigorous memory has not more identity about him than the child who is just beginning to taste the sunshine of existence. In both the vital forces are operating continuously, and both have, therefore, a conviction of continuous existence. In the morbid conditions of double consciousness, however, there is something positive as well as negative. One identity is laid aside, with all the remembrances connected with it, but another is put on, and with the new identity a new memory acts in concert. A well-marked illustration of much that has just been stated is to be found in the case related by Professor Stillman, and repeated by Dr. Pritchard. "A lady of New England, of respectable family, became subject to paroxysms, which came on suddenly, and after continuing an indefinite time, went off as suddenly, leaving her mind perfectly rational. It often happened that when she was engaged in conversation she would stop short in the midst of it, and commence a conversation on some other topic, not having the remotest connection with the previous one, nor would she advert to that during the paroxysm. When she became natural again she would pursue the same conversation in which she had been engaged during the lucid interval, beginning where she had left off. To such a degree was this carried, that she would complete an unfinished story or sentence, or even an unfinished word. When the next paroxysm came on she would continue the conversation which she had been pursuing in her preceding paroxysm; so that she appeared as a person might be supposed to do who had *two souls*, each occasionally active

and occasionally dormant, and utterly ignorant of what the other was doing."

It is necessary to remark that in this case, as in the one immediately following, there is no distinct statement as to an impairment of personal identity. These cases, however, are in all respects so closely allied to others in which there was an obvious involvement of that fundamental belief, that it is almost fair to conclude that in them, too, it was somewhat defective. The morbid condition was not merely the result of a failure of memory and an obliteration of the past, for the acquisitions of the past were retained and made use of in the new conversation, which had no connection with the conversation of the previous state. The patient in both cases was a new creature. In the case which follows, and which is recorded by my father, Dr. W. A. F. Browne, there was in the natural and healthy state an entire effacement of one half of the actions and impulses which went to make up the patient's history, which rendered her the complex being that she was, and preserved her in relation to surrounding persons and objects.

"J. H.—, about two years ago, was affected with hysteria, previous to a great constitutional change. The symptoms noticed were the globus and spasmodic flexure of the fingers. The phenomena which now exist followed this state, and were not modified by the establishment of the constitutional change alluded to. For many hours each day the patient is in what may be called her normal condition; for nearly an equal number she is in an abnormal state. She has no recollection during the one what passes or what she has done, or acquired, or suffered, during the other. There is no tie or connection between the two periods. The somnambulic state is ushered in by a yawn, a sensation of globus, and the drooping of the eyelids, which remain half-closed during its continuance, but do not obstruct vision. It generally passes away by the ejection of a mouthful of phlegm. Between these two acts, the yawn and the eructation, the woman is vivacious, more mirthful than when *herself*, knits, reads, sings, converses with relatives and acquaintances, and is said to display greater shrewdness than at other times. Her letters are better in composition and penmanship than she can produce when awake, or in her natural state. This may be called her state of clairvoyance. When aroused, she has no recollection whatever of anything that has taken place. She has forgotten the persons she has seen, the songs she has learned, the books she has read, and if she resumes reading it is at the place at which she had stopped when in her natural condition. When she reads in her abnormal state the same thing happens. The development of the fit is generally sudden and unexpected, but occasionally it is determined by noise or the movement of articles in the room, such as the fall of a poker or an alteration in the position of a chair. Her bodily health

is perfect; all her functions are regular and vigorous. She has lately complained of headache after the cessation of the somnambulism, and upon one occasion she described the painful sensation as confined to one side of the head." In connection with this case, it is worthy of remark that it was similar to those recorded by Mr. Dyer in the 'Philosophical Transactions,' by Dr. Dewar in Abercrombie's 'Intellectual Powers,' and by Major Ellicott in Combes' 'Phrenology,' in so far as the patient was a girl of hysterical temperament, and manifesting symptoms of well-formed hysteria. The disease in this case yielded to moral treatment, all the morbid phenomena disappearing before the dread of removal to an asylum.

In Major Ellicott's case the lady periodically passed through two conditions, separated from each other by a profound sleep, and termed by the lady's relatives the "old" and "new state." These two states were in no way bound together, the patient's disposition, capacities, and attainments, being different altogether in each of them, so that she seemed alternately to be two distinct persons.

The following instance of double consciousness is in many respects unique, and is taken from notes of the case made by my father, under whose care the gentleman was. A. B. felt convinced that he was himself and another person at the same time, and could not divest himself of the belief that in his own body were two minds, suggesting courses of conduct widely opposed. He felt assured that A. B., his old or original self, was a base, abandoned villain, tempting his new or other self, to whom he attached the emphatic *ego*, to commit misdemeanours and acts to which his feelings were opposed. The second person of the duality struggled with and resisted the vicious solicitations of the first, such as that he should perpetrate self-destruction. This internal combat sometimes became objective, when the hands, acting under the will of the original or virtuous personality, beat and bruised the legs, body, and head, which were supposed to belong to the second or depraved nature. The blows were so severe as to leave marks for days; and when these were referred to, the voice of No. 2 said, "Don't justify him; he deserved it." The struggles between the two natures generally took place during the night, the interference of the night-watch being sometimes required to separate the belligerent powers. In conversation with those around, A. B. spoke at one time as No. 1 and at another as No. 2. In this gentleman the normal personal identity of the individual was set aside by an erroneous belief, springing out of cerebral disease. A state of mental duality existed, with this unusual peculiarity, that the two opposite mental states did not apparently alternate, but ran parallel to each other. The true explanation was, that the two conditions did in reality rapidly alternate with each other, the mind being thrown first into one attitude and then into another, according to certain principles of

suggestion; just as, in reading a dialogue, we can carry on two or more independent trains of thought, by turns. When we argue with ourselves, when we are doubtful upon any point, and hold an internal controversy regarding it; when we hesitate between two courses of conduct, and submit to our own judgment the reasons for and against each, we are, so far, in the condition of the gentleman whose case has just been related. But our nervous systems being healthy, and our personal identity entire, and correlating the order of phenomena in nature, we do not project the arguments on the one side without us and convert them into hallucinations, nor do we conceive them to be the offspring of another intelligence resident within us. On the contrary, we continue to regard both processions of thought as the products of one mind; we continue to recognise the links that connect them, no matter how antagonistic they may be, and to believe that two very adverse counsellors may be united in one personality. But all this A. B. failed to do. It may have been in him, the ideas of opposite complexions succeeded each other with morbid celerity, scarce giving him time to scrutinise the process of their succession; but at any rate, he utterly failed to classify these ideas, to reduce them to order by tracing them to a common origin, whilst he discriminated, distinguished, and analysed them all too narrowly and minutely. This he did in obedience to the natural bent of his mind, for even when in health he had been always prone to indulge in abstruse and vain philosophical inquiries.

It is sometimes attempted to explain cases of double consciousness, such as those we have described, by a reference to Dr. Wigan's bold and startling theory of the duality of the mind. The theory, however, we venture to think, fails to throw any light upon the conditions, for if there be two minds, capable, under certain circumstances, of independent action, each, whilst acting independently, ought to manifest all the ordinary mental powers, and to retain or to lose the recollection of the circumstances of the period when they both acted consentaneously. But if the constantly varying inequalities in the two mental conditions of double consciousness be opposed to Dr. Wigan's doctrine, so also is the mere fact of the transference of consciousness alternately from one to the other. What could determine the conscious existence of one half of the mind in this moment, and of the other half in the next? According to Dr. Wigan's theory, they should both be contemporaneously conscious. To say nothing, however, of the other weighty objections to the duality of the mind, we may remark that there is much more to support Sir Henry Holland's suggestion regarding the duplicity of the brain as elucidating those obscure conditions which we have been examining. It cannot be denied that there are difficulties connected with this theory also, that the evidence is insufficient for its complete esta-

blishment; but still it is more plausible than any other that has been advanced, and explains circumstances that would otherwise be without explanation. Acute or chronic disease, producing obvious lesion, affecting one side of the brain only, might, by disturbing the correspondence or unity of action of the two sides of the cerebrum, occasion double consciousness, and original inequality in the formation of the two hemispheres might also tend to disorder and derangement in the trains of thought, passing into actual perversion on the occurrence of any irritation. In accepting this theory, it is not necessary at the same time to adopt the conjecture that two states of mind may be coincident in time. On looking at other parts of our constitution in which a double organ is made subservient to a single function, we find that accident, disease, and other causes, interfere with their normal functions, and it is therefore conceivable that the two hemispheres of the brain, when subjected to morbid influences, may act separately and individually as well as the organs of the senses and voluntary power, and by their separate action produce incongruity and confusion, where ordinarily all was order and unity, as a result of their entire correspondence.

Changes in the cerebral circulation seem, occasionally, to hold an etiological relation to attacks of double consciousness. A gentleman of refined mind, the notes of whose case have been submitted to me, lost his personal identity, upon assuming the horizontal position. During the day his mind was clear and coherent, and for twelve hours he could laugh at the delusions of his companions and at his own, but at night he believed that he had two natures; he supposed himself to be in a state of mesmerism, that he was mad, and had the delusions of all the persons in the same ward concentrated in himself; that he was at the mercy of supernatural powers, which ruled all his thoughts and actions, filled his mind with visions of things past and things to come, and compelled him to accompany the night-watch on his rounds, and perform many other inexplicable deeds. He, the sane man, positively declared these to be the delusions of an insane man, who was himself, and yet different. This gentleman probably laboured also under the effects of overstrained mental exertion. When in health he had applied himself to metaphysical investigations with intense devotion and energy, and, indeed, his affliction was but the reflection of his ordinary habits of thought.

High intellectual tension, especially when combined with excitement of the feelings, is sometimes productive of other errors of personal identity besides double consciousness—of errors which have not, at least, been usually enumerated as instances of double consciousness, but which, nevertheless, have many points of resemblance to the ordinary standard examples of that affection. Great intellectual efforts, violent emotions, bursts of passion, of anger, of love, of hate, of jealousy, are occasional causes, on the psychical

side, of all forms of alienation ; and the influence of these is greatly increased when they act conjointly with detrimental physical agencies, such as mephitic air, abuse of stimulants and narcotics, alterations of the cerebral structure and of remote organs ministering to respiration, circulation, digestion, and the sexual functions. But the intellectual effort, when associated with mimic emotions, with simulated passions, put on in the representation of some other character and personality, seems to have an especial tendency to produce errors of identity. The individuality of the great actor is sometimes borne away by the tide of passion, the whirlwind of contending emotions, which he has himself created. He conjures up a shadow, and in his contemplation of it forgets his own substance. It is recorded by the biographer of Mrs. Siddons that on the nights following some of her most triumphant performances she was profoundly agitated ; that for hours subsequently, when unrobed, and in the silence and solitude of her bedroom, she walked backwards and forwards, not quite herself, not dissociated from the feelings and sentiments of the Juliet or Desdemona she had represented, and that her looks retained the fire or disdain, as the case might be, of "the tragedy queen." This observation was recorded to demonstrate the reality and sincerity of her acting, and it certainly demonstrates this ; but it does more, by showing that her impersonation was complete, that she had not merely assumed a character, but lost her own in the creation of the poet ; merged her identity in that of another mind differing from her own, and experienced difficulty in casting off the fancies of an hour and in regaining her natural and familiar modes of thinking and feeling. Dr. Andrew Combe, I have been told by one to whom he himself described the following scene, was one evening suddenly called to the Theatre Royal Edinburgh to see M—. The curtain had just fallen and the foot-lights been extinguished, and he found the company still in their grotesque dresses, in great alarm, and rushing to and fro around M—, who had performed the part of Midas, and was seated grasping convulsively the arms of his chair, staring wildly and fixedly on air, and muttering through clenched teeth, "I can't get out ! I can't get out !" The ears of the closely fitting dress nodded over his brow, the paint had been partially removed by the water used to restore consciousness, the face was deadly pale, he was surrounded by a cloud of smoke from the sacrifice of royal plumes of feathers, and altogether the scene mingled much of the ludicrous with the horrible. In a short time the exclamation "I can't get out !" ceased, and after a few full sighs the morbid condition passed away, and the actor was "himself again." He then stated that his feelings and fears had overmastered him, that he became overpowered by the conviction that he could not and never could denude himself either of the character or of the leather skin ; that instead

of turning everything into gold by his touch, he was himself transmuted for ever into a mine and mummer; and he felt as if bound and closed up, "cribbed, cabined, and confined," and that all his struggles to escape were and must be fruitless. M— was, constitutionally, a sensitive, impressionable man, and at one time a somnambulist. Similar anecdotes have been related of several illustrious actors and actresses. Rachel experienced attacks like those of Mrs. Siddons. It is stated in the affecting episode of Coralie Walton, in Vandenhoff's 'Dramatic Reminiscences,' that the fragile, heart-broken girl could not, at the conclusion of Hamlet, doff either the character or the madness of Ophelia. It is impossible for us to say how often the truly great artist does really throw off his own identity and put on that of the character, so long and ardently studied, so triumphantly represented. That this is sometimes the case there can be no doubt. The heat, the anxiety, the excitement, the glare of light, all tend to induce the morbid condition. But in quiet retirement, or in the paths of daily life, the exclusive or excessive study of any one character or person may bring about mono-idealism and interfere with identity, so that at length a man may come soberly to believe himself to be truly the person whom he has so minutely contemplated, probably admired, and act in all things in harmony with his belief. Cases of monomania in which this is an unmistakeable and permanent perversion of identity are, as has been already mentioned, of rare occurrence, but they are occasionally encountered. On visiting an asylum once I saw a man in the dress of a patient, standing in a shady corner of the airing court, aloof from his fellows, in the attitude of an ecstatic, with eyes turned heavenward and hands crossed upon his breast; his hair was long and hung about his shoulders, his face pale, his expression gentle and devout, and, altogether, his aspect was so striking as to attract my special attention, and to induce me to inquire of my medical guide, whose permission I have to place the case on record, about his history and delusions. I then learnt that this man had for years past believed himself to be Christ, and that he never for a moment forgot or abandoned this delusion, but that his whole life and conversation were in accordance with a fixed and predetermined plan, and with the impious fancy which so constantly and exclusively occupied his mind. He had been a labourer, of loose morality, of little lore, either secular or religious, when suddenly, after a period of excitement and ardent study of the Bible, he became persuaded that his personality was changed. All his real antecedents sank into oblivion. He forgot everything about the cottage where he was born and where he had spent his life. He could not find his way about the fields which he had roamed over as a boy and cultivated as a man; he denied his relatives, and treated them as strangers, and yet he displayed considerable power of mental

concentration when applying himself to the subject uppermost in his thoughts. He carefully studied the New Testament, and adopted the Gospel narrative as being an accurate account of his earthly career. He would talk of the miracles which he believed he had wrought, of the parables he had spoken ; he would reprove those who laughed at him as scoffers and blasphemers, and promise rich rewards to the patient auditor. When placed in confinement he continued to cherish his delusions, but was always quiet, docile, and reserved. When I saw him even the wild fantastic edifice that had been piled up upon the ruins of his mind had begun to crumble away, for several circumstances in the case heralded the approach of dementia ; but still, with all the unreasoning pertinacity of Wordsworth's little cottage girl, he adhered to his morbid convictions ; and when told that he could not be Christ, for Christ was in heaven, replied, " Heaven is wherever I am." Combe mentions a case corresponding to the above. It was that of a clergyman who, having become insane, believed himself to be Napoleon Bonaparte ; and under this conviction felt the most poignant remorse for having commanded the massacre at Jaffa, and thus caused the death of so many brave men.

Of the psychical epidemics of mediæval epochs, that of lycanthropy is among the most interesting, and in it there was doubtless sometimes a modification of identity. Two kinds of lycanthropy, however, require to be distinguished—first, that in which the zoomorphism was limited to the body ; and secondly, that in which it extended to the mind. In the first variety the sufferer believed—and this belief was fostered by the superstitions of those around him—that at certain periods his body was transmuted into that of an animal, while his mind remained human and unclouded. Learned discussions took place as to whether the transmutation was real or only apparent, but the former was, of course, the more popular view. In the second variety it was held that the mind was involved, and assimilated to that of the creature whose form was worn, its human attributes being temporarily abolished, so that the feelings and instincts of the brute usurped the place of the sentiments and reason of the man. The persons afflicted with this variety of genuine lycanthropy were impressed with the belief that they were really animals ; that they traversed mountains and forests as beasts of prey, running down and eating indiscriminately animals and children ; and the state of the palms of the hands and nails proved that some of the sufferers had actually adopted the mode of progression of quadrupeds. The disease has been chiefly manifested in pastoral districts, and may have been suggested by the superstitions incidental to a solitary and shepherd life, and by the entire devotion of the thoughts to flocks and herds, and the accidents to which these are liable. It was observed among the hunters and shepherds of

Chaldea; it has appeared in Egypt, India, Greece, Germany, Brazil, Abyssinia, and Jura. At the present day solitary cases are sometimes, though rarely, encountered. Those affected with it always exhibited symptoms of grave bodily disease, for we are told that "their looks were pale; their eyes hollow and dry; their tongues exceeding parched; their thirst excessive, and their legs ulcerated." The bodily diseases under which the unfortunate victims of lycanthropy laboured so affected their psychical nature that they misapprehended the external world, themselves, and their mutual relations. The belief of the transmutation in some instances probably depended upon morbid sensations reflected in consciousness as verities. In modern times the demon of lycanthropy is exorcised by tonics, chalybeates, sedatives, nourishment, and moral discipline.

It is probably true that errors of identity sometimes occur in delirious states and during intoxication, but the difficulty of recognising them is then very great, just as it is in mania, so that it is generally impossible to arrive at any knowledge of the condition of this fundamental belief in a maniacal paroxysm. One anonymous author, who has given us some powerful pictures of insanity, blemished, however, by a varnish of inferior fiction, seems to maintain that a condition allied to double consciousness may be sometimes observed in mania, and that the wild raving of that disease may be resolved into a comminglement of two distinct currents of thought. A careful analysis, however, of the incoherence of several maniacs has failed to reveal to us any principle save that of suggestion.

There are, doubtless, errors of identity, having reference to continuous existence in the future, as when the patient believes that his personality is about to be changed. The connection of these with the belief in identity is shown by their coexistence with and relations to errors such as have been already described, having reference to the past and present. A gentleman, illustrating the doctrine of metempsychosis, believed that he had been changed from a dog into a man, but he also held that in a certain definite time the canine nature would return upon him, that he would lose his human identity, and he therefore refused to make any provision for the future, to gain any mental acquisitions, as these would all have to be sacrificed when he again became a dog.

It would be highly interesting to examine personal identity more minutely in relation to the last results of the combination and mixture of all the particulars that go to make up the man, or what are commonly called idiosyncrasies—that give the peculiar character to the man and his apprehension of external nature. This we may at some future day venture to attempt, but at present we must be content with having roughly indicated some of the more prominent of the errors of personal identity, which do not as yet appear to have received that attention which they deserve.

PART II.—REVIEWS.

Epilepsy, its symptoms, treatment, and relation to other Convulsive Diseases. By J. RUSSELL REYNOLDS, M. D. Lond., &c., &c. pp. 360. London: Churchill, 1862.

DR. RUSSELL REYNOLDS has already given to the profession several valuable contributions in connection with diseases of the nervous system. In the work the title of which is given above he confines himself to the subject of epilepsy, and its relations to convulsive diseases generally, but more especially to convulsions of chronic character. Although his work relates to simple epilepsy, which is not so often met with in lunatic asylums, it is not the less valuable on that account, but rather the contrary. It will at once strike many of the habitual readers of this Journal that the cases described differ notably from those met with in the asylum. The one set of cases may throw a light on the other by their very contrast, and on this account the book will be of the greater value to our own specialty. In the following sketch of its contents, selection will be made chiefly from those portions of the author's treatise which have the above tendency, but it must be stated *in limine* that there is no part which does not deserve a careful study, and the whole, for the records of facts alone, will be of great value as a work of reference on the subject. All that can be attempted here is to give an outline map of the regions explored. This may give a general idea of the whole work, but those who would profit fully by Dr. Reynolds's researches should read the work for themselves.

"Disease," Dr. Reynolds remarks, "is the sum total of modifications of function and structure present at a given time; the measure of disease is the degree in which it hinders a man from performing any or all of the functions of manhood. The importance of any given disease is in direct relation to that of the kind of activity which it limits or prevents. The classification of disease is unsatisfactory more or less with regard to all diseases, but especially with nervous diseases. The three elements on which classification is based are organ, function, nature of morbid change. In the author's work, 'On Diagnosis of Diseases of the Brain and Spinal Cord,' &c. p. 48, he has given the reasons for preferring the classification of diseases into groups approaching more nearly to a natural system."

"Chronic convulsive diseases are a very definitive group; they are, with few exceptions, readily recognised as such; and I propose

in the following work to treat of them all, pointing out wherein they differ and wherein they agree, and advancing, by the discovery of the conditions upon which they depend, to a knowledge of the treatment which is appropriate to each."

Vital actions, he proceeds to observe, are dependent upon or are correlated with some physical change in the living organism, though the process may be too fine for our instruments of research. Some symptoms of disease are modified vital actions, others are physical or chemical. The vital are of two kinds, negative or positive. The negative consist in the negation of the vital property, as paralysis, anæsthesia, and depend on some rough or coarser lesion, as the pressure of a tumour. The positive consist in the excess or alteration of the vital properties, and are dependent on interstitial change, as spasm, pain, convulsion, and the like.

"It is no objection to this general proposition that frequently, post mortem, we can discover no organic change in the brain or spinal cord, for convulsions belong to the secondary category of symptoms, and depend on modifications of nutrition.

"We may find a tumour in the brain, or tubercular deposit in its meninges; we may find disease of the kidneys, or such general derangement of the organs as scrofula or rickets can produce; but wherever we may find these easily discovered physical changes they are not the immediate causes of convulsion, for convulsion is a modified vital act of muscularity and nervous force, and its proximate cause is in the nutritive condition of the nervous centres."

The following corollary gives dogmatically the physiological and pathological basis on which the author proceeds to discuss this part of his subject—

(1) Convulsions are modifications of vital actions, and (2) depend on nutrition-changes in the nervous centres; (3) the immediate and proximate cause of convulsion is the same when the convulsion is the same; (4) the proximate cause is an abnormal *increase* in the nutrition-changes of the nervous centres; (5) the remote causes are such as induce an abnormal increase in the nutrition-changes.

These remote causes it is the object of diagnosis to discover, and their removal the aim of the treatment.

A.—The nutrition-change may be idiopathic or primary, a *morbis per se*, the sole deviation from healthy structure being the change in question. Dr. Reynolds argues that this conclusion is warrantable from experience and the admitted laws of pathology. It may be congenital or arise from conditions operating after birth. The sole deviation from healthy structure being the intimate nutrition-change, the tendency to which is innate or acquired; the only variation from normal function, the convulsion. There is no greater difficulty in understanding this condition, he argues, than in comprehending a tubercular or a carcinomatous diathesis.

"For, prior to the development of either tubercle or cancer as a deposit or growth, we assume the existence of a tendency which will eventually reveal itself; and this is all that we assume with regard to convulsion."

"Further, there is nothing in the nature of convulsive phenomena which, *per se*, necessitates the supposition of anything beyond a mere modification of the ordinary healthy processes; in other words, there is nothing for which these processes will not account. There is muscular contraction on the one hand, and loss of consciousness on the other; but that these are quite compatible with healthy structure is shown by their forming part of the daily life-processes of all."

b.—The nutrition-change may be secondary to other changes in the organism, and be the result of such condition. Dr. Reynolds considers that such cases should be included in one general group of eccentric convulsions. The rationale of eccentric convulsion he gives in the following words. In obedience to an impulse from without, the centripetal nerve affects *a change in the nutrition* of the centre, or of that organ which is common to it and to a motor nerve.

Eccentric convulsions may occur in three ways:

"There are, then, different combinations which may be placed in the same general category of eccentric convulsions:—1st. Those in whom the organic condition, which is the immediate cause of convulsions, may be, without special predisposition on the part of the individual, induced suddenly by an eccentric irritation. 2nd. Those in whom that condition is produced by the joint operation of a pre-existing organic tendency and an external disturbance. And 3rd. Those in whom the organic condition is, without special proclivity to disturbance in the individual constitution, gradually brought about by the prolonged influence of an eccentric irritant."

c.—The nutrition-change may be general, and be a part of a systemic or morbid tendency, the nervous centres being involved with the other organs and tissues. Dr. Reynolds tabulates this class of causes thus:

"Diathetic, or cachectic convulsions; from—

"General nutrition-changes:

"Healthy in kind, but morbid in degree; puberty, &c.

"Morbid in kind and degree; tuberculosis, scrofulosis.

"Toxæmiæ, arising from—

"Retained excreta; urinaemic convulsions, 'renal epilepsy.'

"Metamorphosed plasma; pneumonic convulsions, rheumatic, &c.

"Poison introduced from without; 'syphilitic epilepsy,' lead, variola, &c."

"When convulsions occur in a well-marked instance of any one

of the cachexiæ, it may be that they are primary, or idiopathic; it may be that they are secondary, or dependent on eccentric irritation; and further, they may be symptomatic, or produced by the irritation of the nervous centres, as in tubercular meningitis. But over and above these three modes of production, there are numerous cases which require another explanation: viz., this, that the convulsions are the direct expression of the cachexia which is present; the nervous centres being involved in that general nutrition-change which is the essential element of the cachexia itself."

D.—The fourth group of convulsive diseases Dr. Reynolds calls convulsions from centric disease. An intra-cranial tumour, or any other structural change, may set up that peculiar interstitial or molecular change which is the immediate cause of the convulsion; the tumour, or some other cerebral lesion, being the remote, not the proximate, cause of the convulsion; these causes, then, act eccentrically, though situated centrically in an anatomical point of view.

Such is a general review of the causes of chronic convulsion.

"In this volume," writes Dr. Reynolds, "I propose treating only of epilepsy proper, viz., of that form of idiopathic convulsions to which I believe alone this name of epilepsy ought to be applied." In confining himself to the one section of the list of convulsive diseases, or to that which he calls epilepsy proper, the question naturally arises how such are to be distinguished and separated from the rest. This the author gives in the following words from his preface:

"I have analysed eighty-eight cases of simple and idiopathic epilepsy, this being the number of examples of that disease with regard to which I have been able to record accurate information. In them I could trace no evidence of any other affection, and to them I could apply no other name than epilepsy."

It is, then, by the process of exclusion by which the separation is to be made, and it must depend, therefore, somewhat on the amount of acumen brought to bear on the phenomena where these boundary lines are to be fixed.

"Epilepsy," says Dr. Reynolds, p. 30, "cannot be defined by any anatomical change, for no structural condition has been hitherto found with sufficient frequency to be regarded as an essential element with production." Nor can it be "defined by one symptom which is peculiar to it, and pathognomonic of its presence."

In the absence of positive, we must be content with negative, knowledge. The author, who is next occupied by a definition for the disease, for the above reason, probably, finds some difficulty in arriving at a formula which will accurately include all the phenomena. His failure satisfactorily to accomplish what he seeks is a proof of the difficulty which besets the questions. He writes:

"Epilepsy may, then, be defined to be *a chronic disease characterised by the occasional and temporary existence of loss of consciousness, with or without evident muscular contraction.*"

The italics are the author's. He will excuse the remark that, with respect to the latter part of the phrase, surely as much may be predicated of anything—of this book; and the definition becomes reduced to "an occasional and temporary loss of consciousness." But, after all, descriptions are more satisfactory than what are termed definitions, and the following is such, and follows the above quotation:

"Epilepsy should be regarded as an idiopathic disease, *i. e.* as a *morbus per se*, distinct from eccentric convulsions, from toxæmic spasms, from the convulsions attendant upon organic lesion of the cerebro-spinal centre, and, in fact, from every other known and appreciable malady."

The cases of epilepsy and epileptiform diseases met with in asylums belong, in much the larger proportion, to the class of symptomatic convulsions from brain disease, &c. But a few only are of the description which forms the subject of Dr. Reynolds's subsequent pages.

"Hasse has, I think," Dr. Reynolds writes, "stated very correctly the relation which central lesions occupy to the disease in question, viz.:—'Es ist also ein Irrthum, das Wesen der Epilepsie in einer größeren Läsion des Gehirns und seiner Umgebungen zu suchen, eine solche, wenn sie vorhanden ist, wirkt als zufälliges Moment, indem sie, natürlich weit häufiger als entferntere Läsionen jene feinere Veränderung der Hirnsubstanz hierbeiführt, welche der Epilepsie wesentlich zum Grunde liegt.'"

"M. Sandras appears to be equally correct when he speaks of central lesions as 'la cause prédisposante de l'état épileptique du cerveau.'"

Dr. Reynolds devotes eighty pages to a critical examination, by the numerical method, of the symptoms of epilepsy proper, dividing them into the paroxysmal and interparoxysmal.

Epileptic patients sent to asylums are selected on account of the existence of mental symptoms; it will be, therefore, especially interesting to know the proportion of epileptic thus affected. Probably imbecility, which is equivalent to incapacity of earning a livelihood or of taking care of themselves, is the proximate cause for the transmission of the epileptic person to a lunatic asylum. Dr. Reynolds found that the memory was normal, or affected only immediately after the fits, in 43 per cent. of his cases, and more or less defective in 56 per cent., but only to a great degree in one sixth of the whole. Apprehension was normal in 62 per cent., defective in 37 per cent. The general conclusions are thus summed up:

“*Conclusions.*—1st. That epilepsy does not necessarily involve any mental change.

“2nd. That considerable intellectual impairment exists in some cases; but that it is the exception, and not the rule.

“3rd. That women suffer more frequently and more severely than men.

“4th. That the commonest failure is loss of memory, and that this, if regarded in all degrees, is more frequent than integrity of that faculty.

“5th. That apprehension is more often found preserved than injured.

“6th. That ulterior mental changes are rare.

“7th. That depression of spirits and timidity are common in the male sex, but not in the female; that excitability of temper is found in both.”

Probably, therefore, not more than about 16 per cent. of the whole number of epileptics would be deemed objects for a lunatic asylum, and of these only a twentieth would be paupers. This will afford some notion of the prevalence of epilepsy.

For a detailed examination of all the symptoms the space will not suffice; and this part of the work, which is much occupied by figures, will not admit of any epitomising, but requires a careful examination and study.

We pass to what the author has to say on what he terms the natural history of the disease; or, (1) its prevalence, which has been a little anticipated; (2) its etiology; and (3) the relation between its symptoms, and (4) the mental condition of epileptics, in its several relations. His general conclusions on these points will be read with much interest, and especially that the presence or absence of intellectual failure he found to be independent of hereditary predisposition to the disease, of the age at which it commenced, or the sex; and, lastly, that the duration of epilepsy *per se* is without influence upon the mental condition of epileptics (p. 173). The above is contrary to the generally received notions and the opinion of Esquirol, from whom we have so many of our current notions on the disease in general. The chapter, however, requires to be studied, and the full force of the words “*per se*” must not be lost sight of.

“The general conclusion, therefore, in regard of age at commencement and the duration of the disease, is of much interest in relation to the mental condition of epileptics; for, while on the one hand neither age *per se*, nor duration *per se*, can be shown to determine the presence of intellectual failure, or the degree to which that deterioration may be carried, there is, on the other hand, evidence to show that an early commencement of the disease lessens the probability of mental incapacity, both as regards the fact of its occurrence at all, and also the rapidity with which it will be brought about. A

late commencement of the disease, on the contrary, is more likely, not only to entail intellectual failure, but to develop that condition speedily."

The next question which Dr. Reynolds discusses is whether the presence or absence of motorial phenomena exerts any influence on the mental condition of the epileptic; and he concludes, from the analysis of his cases, that the influence either way is very trifling, but that motorial phenomena are not unfavorable, but rather the reverse, to the mental condition. He also finds the mind is not influenced by the state of the general health of the patient nor by the number of attacks, but that the frequency of the epileptic fits is one condition which favours the mental failure. And with respect to the severity of the attack, his evidence is not sufficient to determine its influence. The author next examines the kind of the seizure and occurrence of the "*petit mal*," the general *résumé* of which is in the following words:

"That neither one of the following elements—kind of attack, frequency of either form, rate of frequency, nor duration in years—is, either by itself or in combination with the other elements mentioned, sufficient to determine the mental condition of the patient; for the two cases agreed precisely in all these respects, and yet in the one there was no trace of mental deterioration discoverable, whilst in the other the failure had been carried to the worst degree.

"Again, we learn also that such a high rate of frequency as eleven hundred attacks in the year may exist for seventeen years without producing intellectual change, whereas so low a rate as seventy-two in the year may damage the mental condition most seriously, and that in five years."

Lastly, Dr. Reynolds concludes that the failure of intellect of the epileptic bears no relation to the circumstance of the disease having arisen through "psychical disturbance."

We pass now to the author's views on the pathology.

"Pathological anatomy has shown three things:—1. That there is scarcely any morbid condition which may not be found sometimes in the bodies of epileptics. 2. That no structural change is constantly found at all periods of the disease. 3. That some lesions are of more common occurrence than others." While this method, therefore, fails to demonstrate the seat of the disease, it furnishes proof that many lesions have no causal relation to its phenomena, and it affords presumptive evidence that other changes may be most duly regarded as its effects."

The method which Dr. Reynolds considers has been more productive of results is the deductive. He gives a cursory survey of the opinions advanced on the theory of genesis of epilepsy by Georget, Prochaska, Marshall Hall, and finishes his remarks by these words:—
"Schroeder van der Kolk has gone still further, and has argued with

great force, 'that the starting-point of the various convulsive movements in epilepsy must be sought in the medulla oblongata.'

"To this conclusion the mind has been conducted by a series of eliminations carried on by the accumulation of physiological facts and principles. The two essential elements of a convulsive paroxysm being involuntary muscular contraction and loss of consciousness, some organ has been sought whence changes common to the two classes of phenomena should originate. The researches of Marshall Hall proved that convulsive movements were due, not to the cerebrum, but to the spinal centre; Weber demonstrated that, while galvanization of the spinal cord produced tetanic spasms, a similar irritation of the medulla oblongata induced spasmodic phenomena in a clonic form; and Dr. Todd showed that epileptiform convulsions arose from galvanization of the mesocephalon and tubercula quadrigemina. These results have all been confirmed by Dr. Brown-Séquard, who has shown that epileptiform convulsions occurred in his guinea-pigs after removal of all the encephalon except the pons Varolii and medulla oblongata. Similar results have been obtained by Kussmaul and Tenner."

The two phenomena, loss of consciousness and convulsion, being the condition or state produced, and the medulla oblongata the organ through which they are produced, the question arises, what is the immediate operating cause? Dr. Reynolds argues that the former phenomenon, loss of consciousness, is a simple negative or arrest of function of the brain proper, as proved by the fact that the same effect results from the removal of the cerebral hemispheres, and that the latter phenomenon, the convulsion, can be artificially induced by direct action exerted on the medulla or upper part of the spinal axis; that the effect, the phenomena produced, is not one of structural but merely functional kind, and the whole a modification of normal action. That the change in the medulla or cerebral hemisphere is not an alteration of structure, is shown by the condition of the patient in the interparoxysmal period, who, in many cases, presents no deviation from health or healthy function.

The phenomena do not differ from normal function in kind, but in degree only. Is the alteration through the effect of increased or diminished action of the organ involved?

"If there is such a thing as 'action' on the part of the medulla oblongata or the spinal cord, the facts appear to me to warrant no other conclusion than that, during the onset of the epileptic paroxysms there is 'over-action' of these centres, and that such over-action is their proximate cause."

The author points out that there may be two conditions which may conduce to the same end and produce increase of action. The impressionability of the organ acted upon may be increased, or the excitant may be in excess, the former of which Dr. Reynolds

believes to be the state in epilepsy, and he quotes the authority of Dr. Brown-Séquard, who agrees with him in this respect.

"The nature of the morbid change in epileptics is an exaggeration in degree of the functional activity of the medulla oblongata and upper part of the spinal axis."

But how is this over-action brought about? In the first place, Dr. Reynolds believes that the condition may be idiopathic—a *morbus per se*.

"Increased activity of the reflective centre may then exist by itself, be developed primarily, just as a similar kind of change may occur in other organs; and this in consequence of hereditary predisposition, congenital disposition, or subsequent morbid change. There is no reason why the organ at fault in this malady should not change primarily as well as any other organ, or as well as the whole congeries of organs which constitute the body. Deviation from health must commence somewhere, and in true epilepsy there is defect of evidence to show that it has commenced, or even after many years exists, elsewhere than in the part referred to."

The disease may be transmitted hereditarily. "It may be the result of intense (functional) disturbance from violent external impression." This may be mental or bodily. It may be induced by a general cachectic condition, affecting the medulla with the rest of the body; or the nervous centres may be affected by the above changes, which involve the whole organism; or, though not morbid in kind, as dentition, puberty, and pregnancy—

"Augmented activity in the nutritive processes of the medulla oblongata and spinalis is the prime and essential fact in epilepsy; it needs the addition of but an 'exciting cause' to set in motion the whole train of phenomena which constitute the attack."

"The last mode in which the medulla oblongata and the upper part of the spinal axis may become so affected as to produce epilepsy is by the operation of morbid, accidental, or experimental lesion in some portion of the nervous system. That cerebral or spinal tumour, chronic inflammation of the meninges, softening of the brain, neuromata, &c., &c., might occasion convulsions of epileptiform character, has long been known; but it has been frequently urged in this work that these cases are to be distinguished, in the majority of instances, from true epilepsy. Their clinical history differs either altogether, except in the mere existence and general form of the attack; or in part, there being, perhaps, true epilepsy, but, over and above this, the phenomena of structural disease."

"But lesions may be found outside the centre of reflection, and yet within the nervous centres, such as tumours within the cranium, &c. When so situated, they may induce epileptiform seizures in one of two modes: either by their irritant effect upon afferent nerves, such as those in the meninges; or by the extension of vascular

activity from them, as its centre, into the contiguous medulla oblongata."

There is another fact, which is an important circumstance in this disease, and, indeed, in the phenomena of the causation of all diseases, and which does not appear yet ever to have been brought out so fully or placed so high in the rank of operating causes as it deserves to be, viz., the reaction that occurs often between cause and effect, and which may be illustrated in various ways; for instance, thus a person becomes lame from a fall, and, being lame, he is liable to other falls; so the fall produces the lameness, and lameness falls. A person gets an attack of bronchitis, which produces an irritative cough; the cough increases the irritation in the bronchus.

"Of great interest," says Dr. Reynolds, "is the further fact established by Brown-Séquard, viz., that with the change in the centre parts there is also an alteration in the condition of some centripetal nerves, or of their peripheric expansion. The paroxysms are induced by irritation of the latter, and sometimes cured by its cauterization." "And Van der Kolk suggests what is probably the true relation of these groups of phenomena, viz., that the constant nervous irritation," caused by mechanical peripheral injuries "gradually affects in the same manner the medulla oblongata." Again, at p. 154, Dr. Reynolds writes—

"The nine cases placed in the list were illustrations of confirmed epilepsy, the attacks having been first occasioned, and subsequently reproduced, by eccentric irritation; or, such having been the case at one period of their history, the attacks at a later period occurred without any demonstrable eccentric irritation."

The next division of Dr. Reynolds's work is on the relation of the several symptoms of the disease to the primary cause, or primary fact, which he examines in detail. The chapter of the diagnosis follows, of which it can be only here said that it deserves attentive study. The author appends a copious bibliography, and the value of the book is greatly enhanced by an admirable table of contents and index, the former of which alone is a valuable survey of the whole subject.

We have extended this review to some length, but not to greater than the importance of the subject, but especially the learning and ability displayed in the author's work, demands. The analysis may, it is hoped, afford a general view of the author's opinions; but the detail and filling in of the picture should be examined in the book itself by every one having epileptic patients under his charge.

W. H. O. S.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

I.—*Foreign Psychological Literature.* By J. T. ARLIDGE,
A.B. & M.B. Lond., M.R.C.P. Lond.

THE system of exchange with other journals has enabled us to increase the number of periodicals from which we may cull matter for these excerpts, and may hope to maintain and to increase their interest and usefulness among our readers. Moreover, we shall not restrict our choice of extracts to the contents of foreign journals only, but extend it also to essays, brief memoirs, and to the summaries of the contents of works of more considerable magnitude which come before us, with the intention of more fully representing the state of opinion and practice prevailing on the Continent and in America, with regard to whatever concerns the pathology and treatment of insanity and the management of asylums. And it is another portion of our design, when detailing the opinions and labours of our fellow-workers in psychiatry in other countries, as far as practicable, to form an estimate of them by the light of, and in comparison with, those of our own countrymen; in other words, to attempt a critical examination of their value and importance.

The enlarged scope of our task will render more acceptable to us the receipt of essays, brochures, and reports, from abroad, both from authors and publishers. The more fully we can be kept *au courant* with foreign psychological literature, the more perfect will be our mirror of it; and none, we believe, can be found to gainsay the advantage of learning what plans are formed and what progress is made in ameliorating the condition of the insane, and in unfolding the pathology of insanity, by the distinguished physicians who labour beyond the shores of our own country.

1. *On the occurrence of Insanity among Criminals in Solitary Confinement.*

DR. GUTSCH, the resident physician of the prison of Bruchsal, in the duchy of Baden, in which the solitary or cellular system of confinement has been carried out above twelve years, has contributed a painstaking report of his experience of the system upon the mental condition of prisoners, to the '*Allgemeine Zeitschrift für Psychiatrie*' for 1862.

He commences his paper by pointing out the particular arrangements of the Bruchsal prison, and states that there are many departures from the severe discipline originally pursued in the Pennsylvanian prison, where the cellular system was first adopted. The prison itself was constructed in 1848, after an English model. The inmates, though completely isolated from their fellow-criminals, both day and night, are taught and engaged in some handicraft, the proceeds of which go to their own benefit. They are, moreover, regularly visited in their cells by the numerous staff of warders and superior officers, and thus, by this contact with others, by regular occupation and instruction, by opportunities for reading and public worship, and by exercise in the airing-courts, the evil effects of seclusion on mind and body are, as far as consonant with the carrying out of the plan of isolation, obviated. It is only in cases of bodily illness of a chronic character that the plan of separate confinement is departed from and the patients transferred to an infirmary, though even there they are still submitted to numerous restrictions, and, when their malady permits, are retransferred to their prison cells. Another feature of the Baden prison is that convicts of all classes and ages are transmitted to it, and placed under the same discipline.

Dr. Gutsch presents a tabular statement of all the cases of mental aberration which have occurred in the prison since its institution, and remarks that he has included in it every instance of mental disturbance, whether it was slight or severe, transitory or lasting. From this table it appears that, from the opening of the prison wards in October, 1848, until the end of 1860, there occurred 84 cases of mental disorder among 2666 prisoners admitted within that period. The proportion of such cases to admission is, therefore, 3.15 per cent. In another column he exhibits the per-centage of cases on the average numbers resident in each year; and from this it appears that in each of the years 1853, 1854, 1855, and 1856, the number of prisoners attacked with mental disorder exceeded that in any of the preceding or subsequent years, ranging from 2.70 to 3.39 per cent., whilst in other years the per-centage has on the average been under 2 per cent. of those resident. Respecting the social position of the 84 insane convicts, 65, or 77 per cent., were unmarried; 17, or 20 per cent., married; and 2, or 3 per cent., widowed. Again, insanity showed itself much more prevalent among the labouring, uneducated class than among those of higher station and education, occurring in 3.30 per cent. of the former and in 1.08 per cent. of the latter class. The relation observed between the onset of mental disorder and the character of the crime of which the prisoners were guilty is shown by another table, from which it appears that, of 1354 committed for larceny, 24, or 1.77 per cent., became insane; of 205 committed for murder, 21, or 10.24 per cent.; of 101 imprisoned for robbery, 6, or 5.95 per cent.; of 256 guilty of mutiny, insubordination, and deser-

tion, 11, or 4·29 per cent.; of 53 confined for forgery, 3, or 5·66; and of 87 imprisoned for incendiarism, 2, or 2·30 per cent. Other crimes are specified, and among them two, viz., murderous assaults and poisoning, 6 convicts having been confined for the former and 3 for the latter offence. Of the 6 guilty of assaults, 1 became insane, or 16·66 per cent.; whilst of the 3 prisoners, 1 also became mad, or 33·3 per cent.; a ratio in each instance of an astounding character, though valueless in drawing conclusions, owing to the very small number of instances in question.

The necessary limits of an abstract compels us to refrain from an analysis of this interesting paper, which occupies three sheets of the journal in which it is published; we therefore turn to the brief sketch of results, appended by the author himself.

1. The general tendency of crime and imprisonment to develop mental disorder, fostered by natural depraved predisposition, receives a further impulse by isolation. 2. Cases of mental disorder, attributable exclusively to solitary confinement, have, during the twelve years of the existence of the prison, been few in number; in the majority of instances predisposing circumstances have existed in the individuals themselves, or in conditions external to them and independent of the confinement under which they were placed. 3. One half of all the cases was of an extremely slight character; and the course and termination of most of them was very favorable, and the proportion of recoveries equal to 70 per cent. 4. Superior education and the mental activity enforced by instruction during the period of imprisonment operate as safeguards against the ill effects of solitary confinement. 5. The first period of incarceration, particularly the first two half years, are most favorable to the outbreak of mental disturbance, whilst, on the contrary, the lapse of time diminishes the injurious results of isolation. 6. The nature of the crime is directly related to the proclivity to insanity; thus, for instance, theft much less compromises the mental integrity than do crimes in which the passions are called into violent action. 7. With respect to the high moral value of solitary confinement as a means of stirring up or forcibly arousing the mind, the results arrived at from experience, after taking into account the dangers threatening the mental integrity, conclusively prove what a powerful engine we possess in that system, and how energetically it may act in the reformation of criminals. Lastly, our conviction of the advantages of this kind of imprisonment over all others, whether for the purposes of incarceration or of reformation, cannot be shaken.

2.—*On Religious Revivalism in the Orphan Asylum at Elberfeld.*

(‘*Allgemeine Zeitschrift für Psychiatrie*,’ Drittes Heft, 1862.)

Religious revivals, so-called, which have been native to the soil of this country since the days of Whitfield and John Wesley, and are luxuriant in growth among our cousins across the Atlantic, have also become transplanted to Germany, and in a paper contributed by Velthusen, the Protestant chaplain of the asylum of Siegburg, to the ‘*Zeitschrift für Psychiatrie*’ (3 Heft, 1862), we have a sketch of a remarkable outbreak of religious and cerebral excitement among the children and others in the orphan asylum of Elberfeld, in Rhenish Prussia, in 1861. The movement commenced with a series of prayer meetings, suggested by the Evangelical Alliance in England, held at the commencement of the year 1861. The purpose of these prayer meetings was to supplicate an outpouring of the Holy Spirit in general, and the conversion of the children of the asylum in particular. However, at first the children took no part in them, but only the staff of the institution. On the 13th of January, at the close of the first week of such meetings, a girl, seventeen years old, presented herself to the superintendent, lamenting her sins, and expressing an ardent desire of forgiveness. She was soon followed in this course by another girl of eighteen, and in fourteen days seven female children in all were similarly affected. At first they remained tranquil, and pursued their usual work, weeping, however, and praying much. On the 28th of January the excitement made its appearance among the boys, and persisted night and day, destroying their sleep. Sixteen of them were placed together in a room, and rather encouraged in the religious fervour by the superintendent, who had, we suppose we must say, the satisfaction of hearing the boys expound and preach the Scriptures and make fervid prayers. On the evening of the 31st the children, boys and girls, thirty in number of each sex, were admitted to the meeting held by their superiors, and from this date, the third period (so distinguished by the writer) commenced, when an unfortunate boy, who had gone to bed before the meeting, but could not sleep, heard that his conversion had been a special subject of prayer by his fellow-pupils, became excited, and was seized with convulsions. The fit lasted at that time three hours, and on the following day he had two similar attacks. During the fit he was speechless, but not unconscious, and afterwards lapsed into a state of ecstasy. This event made a deep impression upon the other children. On the 2nd of February, above sixty boys and as many girls engaged in the prayer meeting, and among them the boy who had suffered the convulsive seizures. Like several other lads, this one also prayed aloud at the meeting, but was presently again seized with a fit, whereupon a great commotion ensued

among those present, and particularly among the girls. The result was that two adults and several children had to be carried out from the meeting. On the 3rd of February the excitement was extended to the little children who had taken no part in the prayer meetings, but had been put to bed before these took place in the evening, and infants seven and eight years old were found crying aloud for mercy and forgiveness. On the 5th the bodily disturbance of the sufferers became most apparent. Many children lost their speech, beat about with their hands, and tossed their heads so violently about that they required to be protected against injury. In some the attacks were persistent, in others intermittent. Within a brief period fifty children were seized with these convulsive symptoms. On the 17th of February the prayer-meetings were suspended, and the cases of mental disorder fell to twelve, and soon afterwards ceased.

Velthusen, in his examination of these circumstances, seeks for historical parallels in the accounts of religious revivals in England, Ireland, and America. Among other things, also, he tells us that the cholera in 1849 devastated Elberfeld, and carried off a thousand persons, and that one consequence of this visitation was an elevation of religious feeling amongst the inhabitants, particularly among those of the hamlet in which the asylum is placed, and which is about a mile out of the town itself. Another circumstance to be noted was that the staff of the establishment partook strongly of the religious sentiment, and held opinions much akin with those sects in England among which revivals are a cherished institution. Like most writers, the author of this paper attributes such abnormal manifestations in a community to the effect of sympathy and of imitation under high mental excitement, without any desire to deceive except in a few instances; and in illustration he adduces epilepsy as an imitative disease, and recognised as such by the ancient Romans under the name of *morbus comitialis*. He further appeals to ecstatic seizures recorded of monks in the dark ages, and to various convulsive maladies attacking large numbers of persons in bygone times, as recorded in history; in several such instances, however, no religious element entered, but only some strong emotional excitement. Persons of weak minds, women and children, are most prone to such seizures, and the constant grouping of the same persons together, whether in schools or factories, or in other places where they are cut off from wide intercourse with people at large, contributes strongly to the springing up of such morbid conditions. The worthlessness of such revivals is proved by the ephemeral character of the religious fervour, and by the absence of any permanent advantage to the moral and religious state of the individuals who have been their subjects, except, possibly, in a very few instances.

3. *On Lucid Intervals, in a Medico-legal Point of View.*
By DR. LEGRAND DU SAULLE.

(‘Gazette des Hôpitaux,’ 1861.)

A lucid interval, says the writer, consists in an absolute though temporary suspension of the manifestations and characters of the insane state. It is not uncommon in mania (about twenty-five times in 100), sometimes occurs in melancholia, but very rarely in monomania properly so called, and as a most exceptional event when the mind is the prey to hallucinations or illusions, or the victim of acute dementia. Moreover there are certain forms of mental disease which never exhibit them; such are confirmed dementia, imbecility, and idiocy.

The patient enjoying a lucid interval is unlike a monomaniac, who, though, from the limited range of his aberration, he may appear like a sound man, is nevertheless a prey to a false conception, and always under its morbid influence in his conduct. Moreover, a lucid interval is to be distinguished from those flashes of intelligence and of calm which momentarily and suddenly display themselves at times in the course of mental disorder. Such occurrences are of excellent augury, but are most readily interrupted and arrested by any circumstance affecting the emotions or passions. The return of calm after excitement is another condition not to be confounded with a true lucid interval. Although agitation may cease, the mind is still unhinged, the ideas wandering, and the conversation incoherent; there is no genuine restoration of mental integrity and power.

When a lucid interval is genuine and well evidenced, the former habits and disposition of the patient reappear, the physiognomy regains its bygone expression, and the individual is fully aroused to an interest in his affairs; he encounters his relatives and friends with pleasure, and casts aside the delusions and dislikes his past delirium had entailed, asking the forgiveness and sympathy of those who have been the subjects of them. In an especial manner his affections and moral feelings are found to have resumed their healthy state.

On the other hand, in mere remissions, the attention cannot long be sustained and fixed. There is a want of decision or fixedness about the features; replies are brief, and often evasive; the speech is interrupted or jerking; the voice somewhat smothered, and the general aspect wanting in steadiness and solidity. Again, with respect to those patients who seem well, and are anxious to regain their liberty, we may notice that they make daily protestations of their recovery, and of their no longer being victims to their particular delusions. Their object is to practise an imposition and to dissimulate respecting their state; and when pressed by questions,

they will be found to garnish their replies by falsehoods and misrepresentations. To such the dictum specially applies—“*Incumbit onus probandi sanam mentem.*” No obscurity need be found in making the distinction between the sane action of a lunatic and a lucid interval. The madman does a reasonable thing, but his understanding continues no less disordered; a ray of light has shot across the obscurity of his mind, but it is only meteoric, and leaves no result. On the contrary, in a lucid interval the actions are stamped by logical sequences, and the mental integrity is sustained in its entirety for a given period. If to establish a lucid interval all that was necessary were the proof of a rational act or acts, no cause, however desperate, need fail in obtaining deponents to the fact. But, as Marc has well observed, sane action is but an act; a lucid interval is a state.

Periodic insanity is a phenomenon sufficiently well known. In it the intermissions are frequently true lucid intervals; the relapse into mental aberration distinctly determinable, and not seldom occurring at a fixed period. From such cases the simply variable forms of mental disturbance sketched by Esquirol are perfectly distinct. In these latter the calm following excitement is very remarkable, yet the patients are unfit to quit the asylum and to mingle in society. The mind in such does not resume its natural powers and rid itself of the delusions oppressing it, whereas in the former class of cases the mental integrity is so fully restored that they can resume their place and occupations in the world, and, unlike the others, become amenable to the laws for their actions.

Now, with regard to those insane who enjoy an intermission or lucid interval, it is a most delicate question to decide whether a crime committed during such an interval is attributable to diseased propensity or is the result of unimpaired consciousness; in other words, whether it is punishable or not, as the action of a mind free from disease. And legal authorities differ as to the allowance to be made where antecedent mental disorder has been established.

Physicians, when called on to give an opinion in such cases, should not set themselves in antagonism with received opinions, and advocate a general immunity from punishment for crimes committed against society. It is their duty to ascertain the period of the criminal act, and how long an interval has elapsed since the accused was mentally disordered, and to gather from the evidence offered a knowledge of the time at which the lucid interval has commenced or may have ended. Weighing such information by the accepted truths of pathology and practice, the next step is to discover what have been the insane conceptions of the individual during his last attack, to analyse them, and to determine how far the imputed crime stands in relation with them. If, for example, the history of the past delirium shows that the mind has been the prey to homicidal or to incendiary propensities, and to hallucinations of commands to

kill or burn, then, if the act for which the accused is committed is directly associated in character with such tendencies, a strong opinion should be put forward that it was the result of morbid impulse and of the absence of moral control. On the contrary, if no such accord subsist, if some probable ground for the crime can be suggested, and an attempt at self-justification be made, the conclusion must be that it was the result of premeditation and of responsible consciousness, though, from the known history of the previous insanity, no opinion respecting the radical absence of consciousness should be asserted. To sum up, it is possible to reduce the criminal acts committed during intermissions or lucid intervals in periodic insanity to three types:—1. The act is committed under circumstances which leave no doubt in regard to the relative entirety of the faculties. The duty then is to point out the possible influence of anterior attacks of insanity on the will of the criminal, and to extenuate his culpability. Under such circumstances it is for justice to be tempered with mercy. 2. The crime is the act of an individual who, though preserving the appearances of intelligence, is nevertheless the subject of mental oppression. The duty then is to establish the lesion of the understanding by means of evidence obtained by examination of the accused, and by his general bearing and aspect. The conclusion therefrom is that there is legal irresponsibility, and the finding of the court would usually be—not guilty on the ground of insanity and confinement in an asylum. 3. The act is the consequence of deliberate will, but has been almost immediately followed by an outbreak of delirium, or by nervous disorders more or less akin to insanity or to epilepsy. Here the duty is to determine whether simulated disease is not the real feature of the case, and if the morbid phenomena presented do not constitute a too faithful transcript of former conditions; and, in a case admitting of more doubt, to require its provisional removal to a suitable asylum, to institute further observations, and to furnish a report of such further study to the judicial authorities, who will, in all probability, be thereby guided in their decision.

With respect to the bearing of lucid intervals on the validity of testamentary bequests, the French law lays down no rules. The only reference to this matter in the Code Napoléon is—"that to make a will, the testator must be of sound mind;" but in practice the wishes of a person during undoubted intermissions are recognised, and it is left for the legatees to prove that the testator was, at the time of the execution of the will, of unsound mind.

In general, the propriety of a testamentary act is no measure of the integrity of the mental faculties at the time of its execution, except so far as it can be distinctly proved that the mind was at that period free from insanity or enjoying a lucid interval. For the mental discernment indicated by the will may be a consequence of

those temporary glimpses of a sound judgment, often enough noticed in acute mental disorder, and not of any restoration of the reason; therefore the act itself is open to dispute, and does not do away with the charge of madness. For, as M. Brierre de Boismont has pointed out, the wisdom of the act is not in itself a presumption of the existence of a lucid interval.

Lastly, in most instances the representations made to a physician by parties desirous of upsetting a will are marred by self-interest, by inexactness, by exaggeration, and even by falsehood; and the advice by Marc is very good, that to arrive at a sound conclusion the physician should most carefully investigate the value of the documents and evidence submitted to him; and that when such are produced only by persons directly interested in pressing their adoption upon him, he should only give a conditional decision; or, in other words, should intimate it to rest upon the supposed correctness of the facts placed before him.

4. *On the Inequality in Weight of the Cerebral Hemispheres in Epileptics.* By DR. BAUME.

(‘*Annales Médico-Psychologiques.*’ Tome viii, 1862, p. 426-.)

Dr. Baume states that the observation of the inequality in weight of the two hemispheres of the brain was first made by the late Dr. Follet, of the asylum of St. Athanase, at Quimper, in a report of 300 autopsies made by him between 1833 and 1854. According to this physician, such inequality was not found except in cases of hemiplegia and of epilepsy, and was constant in the latter affection. Forty epileptic cases were adduced, and the difference shown to vary from 15 to 290 grammes. To these Dr. Baume, formerly the assistant of Dr. Follet, added, in 1855, ten other observations, making a total of fifty. The following table exhibits the results arrived at.

Difference of	290	grammes	met	with	once	.	.	.	290
"	250	"	"	"	"	.	.	.	250
"	155	"	"	"	"	.	.	.	155
"	135	"	"	"	"	.	.	.	135
"	100	"	"	"	"	.	.	.	100
"	80	"	"	"	twice	.	.	.	160
"	70	"	"	"	"	.	.	.	140
"	64	"	"	"	once	.	.	.	64
"	60	"	"	"	twice	.	.	.	120
"	50	"	"	"	four times	.	.	.	200
"	45	"	"	"	once	.	.	.	45
"	40	"	"	"	five times	.	.	.	200
"	35	"	"	"	three times	.	.	.	105

Difference of 30 grammes met with nine times	.	.	270
" 25 " " four times	.	.	100
" 20 " " seven times	.	.	140
" 15 " " four times	.	.	60
" 0 " " once	.	.	0

Total observations . . fifty times. Differences 2534

Between 1856 and 1862 Dr. Baume has made the following additional observations :—

Difference of 159 grammes met with once	.	.	159
" 125 " " " "	.	.	125
" 102 " " " "	.	.	102
" 85 " " " "	.	.	85
" 70 " " " "	.	.	70
" 55 " " " "	.	.	55
" 40 " " " "	.	.	40
" 31 " " twice	.	.	62
" 30 " " once	.	.	30
" 20 " " twice	.	.	40
" 15 " " " "	.	.	30
" 8 " " once	.	.	8
" 4 " " " "	.	.	4
" 0 " " four times	.	.	0

Total observations . . twenty times. Differences 810

Dr. Baume gives the history and detailed account of the autopsies of the last twenty cases of epilepsy, which we cannot detail here, and in his résumé quotes the opinion of Baillarger, that such inequalities are rather the consequence than the cause of epilepsy, and due probably to the congestion of the fits being more severe, and therefore producing more atrophy in one hemisphere than in the other. Now, in three of the cases adduced in full this opinion seems to be borne out, so far as the fact goes that there was more post-mortem congestion of the atrophied than of the other hemisphere. But, as Baume remarks, in those three cases the inequality of weight appeared connected with a congenital malformation of the cranium, and the epilepsy was itself probably due to the same cause. At the same time the explanation of Baillarger would seem true with respect to the similar cerebral differences in incomplete hemiplegia. Bauchet and Delasiauve have expressed their opinion that it is premature to assign any direct pathological relation between such inequality of the hemispheres and epilepsy, and the latter, indeed, contests the fact of its existence, except as an occasional event.

The existence of different opinions on such a simple matter of fact renders it most desirable that similar researches should be

carried on, and that the existence of inequality should be examined in connection with all other morbid conditions, whether of the brain itself or of its enclosing bony case; and we heartily commend this field of inquiry to our medical superintendents, who have ample scope for it in the multitudes of epileptics which crowd our asylums. Contributions to medical science will be particularly valued in the pages of this Journal, and it will be a great satisfaction to be able to point to the good work accomplished by our English psychological physicians, who ought assuredly to take a higher stand generally as cultivators of the pathology of insanity than they hitherto have done.

5. *Hereditary Insanity.*

(*De la Folie Héréditaire; Rapport Medico-legal,* par le Dr. Morel, p. 29. Paris, 1862.)

M. Morel, of the asylum of St. Yon, Rouen, has recently published a brochure on hereditary insanity, '*De la Folie Héréditaire,*' &c., taking for illustration a remarkable case which not long since created much excitement during its trial at Havre. M. Morel is well known to our students of psychological medicine for his able '*Traité des Maladies Mentales,*' and especially for his bold effort to overturn that symptomatic classification of insanity which has so long been in vogue, and to substitute a more philosophical one in its place. He rejects mania, monomania, and melancholia, from the category of mental disorders, objecting that neither excitement nor depression of mind is a pathological entity, but only an accidental external manifestation or symptom, dependent on various unlike conditions of cerebral action and cerebral lesion. The divisions or groups he constitutes are based upon the intrinsic relations which must subsist between the form of the insanity and the nature of its cause, and stand thus in his classification of mental disorders:— 1. Hereditary insanity. 2. Toxæmic insanity, or insanity due to the introduction of poisonous agents in the blood. 3. Insanity resulting from the transformation of certain neuroses. 4. Idiopathic insanity. 5. Sympathetic insanity; and 6. Dementia. Of this last group he remarks, it is not, properly speaking, a primitive form, but rather a terminal condition, or the sequence of any and every form of primitive insanity; at the same time it has, whatever its origin, certain common characters and distinct internal and external signs.

This etiologico-pathogenic classification, says its author, is calculated to facilitate the solution of the principal medico-legal problems which can be submitted to the physician touching insanity. It is not enough for the medical expert to simply affirm the existence of insanity in an individual, but he must indicate the grounds whereon he distinguishes reason from madness, and the voluntary act from the

result of mental disease. He fails altogether in enlightening a court in a difficult case, by affirming that the crime in question has been the consequence of monomania, or, in other words, of an irresistible impulse to kill, rob, or burn, or to commit any act of depravity. He thereby supplies no rigorous facts by which alone the ambiguities and doubts of the case can be removed, but only advances a worthless theory. To arrive at a certain proof of the insanity of an individual, there must be an exposition of the characteristics, whether intellectual, physical, or moral, which constitute insanity in general, and the different varieties of it in particular. And it is not necessary to be a physician in order to understand the necessary and serious relations which must exist between a cause ever acting on the nervous system and disturbing its functions and the abnormal phenomena of the understanding and emotions attributable to that cause. A magistrate can readily conceive that the nervous disorders of a drunkard are of a different character to those of an epileptic, that the brain may be affected by sympathy or by actual lesion of its substance, and that the symptoms of idiopathic differ from those of sympathetic delirium. In fine, the actions of individuals suffering from disorders of the nervous system bear an impress upon them which enables them to be referred to their true pathological source, and can furnish to judge or jury the most convincing evidence of the morbid state of the accused.

Hereditary taint, in M. Morel's opinion, plays a most important part in determining the question if insanity be the cause of crime in any case. Heredity, says he, dominates the pathogeny of nervous affections; it forms a part of the organization of an individual, and leads to the perpetration of acts of some particular kind, apparently inexcusable, inasmuch as intelligence apparently survives the loss of moral feeling. Heredity, he contends, constitutes by its influence a special *vesania*, and represents the mental conditions variously called instinctive, reasoning, and moral insanity, delirium of the actions, perversion of the moral sense, mania without delirium, and periodic mania. "The principal monomanias of Esquirol, the partial madness, the systematised delirium of some authors, and 'lucid insanity,' as lately so-called by M. Trélat, have their usual origin in the faulty intellectual, physical, and moral dispositions transmitted by progenitors." . . . "The subjects of hereditary insanity are instinctively prompted to evil, and this even at their earliest age. Their disorder is evidenced rather by senseless, dangerous, or immoral acts, than by delirium in speech. Some are intelligent; the memory is not defective; their clearness of mind (*lucidité*) is often perfect, and they can reason like sound men; and when their delirium shows itself, it is commonly restricted to a few objects."

Both Pinel and Esquirol have fully recognised hereditary insanity as having special characteristics. The former insists on its periodic

form or the existence of intermissions as an essential character, whilst the latter has well portrayed the features of hereditary insanity, exhibited in the moral and intellectual states, and in the conduct, habits, propensities and physiognomy of its victims. The children of lunatics, concludes M. Morel, offer a group of characters discoverable, not only in their intellectual and moral, but also in their physical, defects, and to these characters he applies the term "stigmata of heredity."

Proceeding to the critique of the particular case of criminality he adduces in illustration of his general views, M. Morel remarks, on the one hand, the difficult position in which psychological physicians sometimes find themselves, on account of the popular feeling that from their special studies they are disposed to discover madness in every case of crime; and, on the other, the strong feeling which sets in against a criminal guilty of some foul offence, and which, even where insanity is discoverable, tends to displace any commiseration for him and to withhold the recognition of his irresponsibility before the law. On the other hand, an atrocious or unheard of sort of crime is no evidence that the person who committed it is insane. The acts of an insane person are deducible from his malady or flow from it as a logical sequence, just as the acts of a criminal are traceable to his passions or to suggestions which he has freely yielded to. The insane are rarely capable of arranging a defence of their conduct; they frequently conceal, it is true, their actuating motive, but they do not invent falsehoods in excuse of a crime of which they believe themselves innocent; and when they acknowledge themselves worthy of death they glory in the result of their acts, as having been committed by them in order that they might openly manifest to the world that they have been the victims of an unjust persecution.

These last observations by M. Morel are called forth by the survey he makes of the *cause célèbre* of the Marshal Gilles de Ray, in the time of Charles VII, who was found guilty of and punished with death for the wholesale murder of young children for his morbid diversion. And, as M. Morel remarks, this great criminal invented falsehoods in his defence, and at the same time, by his answers to the accusation against him, rendered homage to the voice of conscience by attributing his crime to the instigation of the devil and to a morbid desire to imitate and outdo some of the Roman Cæsars in their acts of horror and inhumanity. Here the conscience was touched by remorse, the criminality of the act admitted, and a motive or attempted explanation suggested; and though the horrid nature of the crime charged might possibly be imagined as assignable only to mental disease, yet the evidence goes to justify the sentence pronounced, and to annihilate the plea of insanity.

It happens with many insane that they commit acts of the most disorderly, absurd, and dangerous character, often, as it were, in-

instinctively and without control, and without any attempt to assign a motive, or, at best, express a motive of the most frivolous kind. Such are the features of hereditary insanity. In other forms of the malady the actions are dictated either by hallucinations, especially those of persecution, or else spring from some source of suffering, either physical or moral in its character. In cases where instinctive spontaneous and unforeseen impulses appear to account for a lunatic act, such impulses imply no special form of insanity, though they have a specific relation with the diseased state of the individuals concerned. And the physician would be greatly embarrassed unless he could discover the relation of such impulsive states with certain perverted organic functions as revealed by symptoms, such, for instance, as severe and intolerable pains in the head, periodic neuralgias, derangements of the principal functions of the economy, distinct or latent neuroses, &c. The last-named symptomatic disorders, latent neuroses, are well illustrated by what is now recognised as latent or masked (*larvée*) epilepsy.

In the case of the hereditary insane the symptoms of their disorder are frequently little noticed until they culminate in some fatal or destructive act. Its signs are placed to the account of eccentricity, of temper, of imitation, &c.; but the physician who has attained a proper conception of hereditary insanity in all its bearings will take a different view of their purport, and be prepared to attach to them their true weight when the long calm or lucid interval is broken and dispelled by the outbreak of vice and crime.

The history of M. Morel's illustrative case, and the able psychological analyses accompanying it, are too long for an abstract of this sort; yet we would heartily recommend our readers to peruse the pamphlet for themselves, and to satisfy themselves of the original and philosophical manner in which its author handles a medico-legal question.

6. *Maniacal Delirium dependent on latent or masked Epilepsy.*

(‘D’une Forme de Delire suite d’une surexcitation nerveuse se rattachant à une variété non encore decrit d’Epilepsie,—Epilepsie Larvée, par le Docteur Morel.’ Paris, 1860, pp. 28.)

The association of maniacal delirium with epilepsy, as usually revealed to us by convulsive phenomena, is a universally recognised fact; but it has of late been demonstrated by M. Morel and Jules Falret that many recurrent forms of maniacal excitement are equally allied with epileptic disease, although this last is not evidenced by its ordinary convulsive features. This variety of recurrent mania, dependent upon what we may call an epileptic habit, has been expressed in France by the term “*épilepsie larvée*”—latent or masked epilepsy.

M. Morel wrote an interesting essay on this morbid condition, under the title affixed at the head of this article. This essay is based on clinical observation, but we have no space here for a notice of the illustrative cases recorded, and therefore confine ourselves to a summary of facts.

"Epilepsy is a neurosis which, by the repetition of its paroxysms, induces in most individuals attacked by it a series of disorders of the sensibility, as well as of the intellectual and emotional faculties, of a special character.

"The different lesions together constitute a form of insanity marked by such characters as distinguish it from all other varieties of mental disorder. Epilepsy most frequently displays itself by convulsions, falls, and vertigo, but it may also be present in the system in a latent or masked state, without such external symptoms, though it still involves the same disturbance of the sensibility and of the intellectual and emotional faculties as if it were manifested by the usual convulsive and vertiginous attacks."

Under such circumstances the diagnosis of epilepsy is arrived at by detecting the principal symptoms characteristic of epileptic insanity, viz.—

"Periodical excitement, followed by prostration and stupor; excessive irascibility, without cause; the manifestation of aggressive violence, marked by instantaneity and irresistible impulse; exaltation of the sensibility; homicidal and suicidal tendencies; intercurrent insane ideas connected with the state of cerebral excitement; exaggerated notions of physical power, of wealth, of beauty, or of intelligence; erotic tendencies coupled with exalted religious feeling; hallucinations of terror; sensation of luminous atmosphere: horrible dreams, or nightmare; gradual progressive debility of the powers of understanding, and especially of the memory; loss of recollection of events transpiring during the paroxysms, the insane symptoms at each periodic attack having, both with reference to the ideas which occupy the mind and to the actions committed, the same identical character; and, lastly, the violence and duration of the delirious excitement determined by the duration of the remission."

Such cases are to be met with not only in asylums for the insane, but also in general medical practice. In asylums two classes of epileptics are found, the one presenting the usual convulsive phenomena, the other not, but only a group of symptoms according with those just sketched, and yet not less dangerous. And it often happens that, after some months, or even years, distinct epileptic attacks make their appearance in the latter class of patients, and then it is generally observable that a mitigation subsequently occurs in the violence of their acts and conduct.

"I do not," says M. Morel, "look upon the phenomena (sketched above) in the light of complications of insanity. They are, in fact,

the ultimate symptomatic expression of an epileptiform neurosis, existing at times in an undeveloped or masked form for a long period, and productive of a variety of madness which has been variously designated—as mania, with fury ; periodic mania ; sudden or impulsive mania ; moral insanity ; instinctive mania ; suicidal, homicidal, &c., monomania. For my part, I regard this form of mental aberration, attended with lesion of the sensibility, of the understanding, and of the emotional and moral powers, as a variety of *epileptic insanity*. At the same time I take care to recognise the difference between the form of epilepsy described and the epileptic, or rather epileptiform, convulsions the consequence of alcoholism or of softening of the brain in general paralysis.” Lastly, the consideration of the morbid state in question has a direct and important bearing in many medico-legal inquiries, for it shows the possibility of referring a certain set of symptoms to their true origin—to a malady of which the criminal acts of an individual may probably be only the external manifestation.

7. *On the Cost of Maintenance of Chargeable Lunatics in France, and on Colonisation as a means of wholly or partially defraying that Cost.*

Such is the subject of a brochure by Dr. Billod, the chief physician of the asylum of St. Gemmes, in the department of Maine-et-Loire. For in France, as in this country, the question of the day is, what is to be done with the ever-growing number of lunatics?—and each French asylum physician, like his English colleague, has a pet scheme to adduce in response to it. The example of the colony of Gheel now occupies the foreground in the attention of the French physicians, and that establishment has been inspected by several of the most eminent of their number, been reported upon, and its merits and demerits, and its applicability to France, eagerly and repeatedly discussed at the meetings of the ‘Medico-Psychological Society of Paris,’ as well as in various writings. Moreover, a scheme of colonisation, of collecting the insane in considerable numbers over a wide area, affording ample opportunities for their out-door employment, has been received with much favour. M. Billod is an advocate of a plan of this sort, and writes to prove that, given so much land and so many insane cultivators as are necessary to farm it by spade labour, the produce will be ample to repay the cost of maintenance of the establishment and of its inmates, cultivators and non-cultivators, and also of its necessary staff of officers.

M. Billod begins his pamphlet by showing the rapid increase in the number of lunatics in France, and appends a table of the total number of admissions into the public asylums in each year between

1835 and 1853 inclusive. From this it appears that, to select one or two examples, there were 3947 admissions in 1835, 5536 in 1839, (*i. e.* when the new lunacy regulations came into force), 7518 in 1845, and 9081 in 1853.

Passing by the causes and possible explanations of this rapid increase in the number of the insane, M. Billod remarks that its consequences are twofold—(1) the enormous tax it involves, and (2) the overcrowding of asylums; and his remedy for both evils is expressed in the following proposition:—that from the profits of agricultural operations, in which the cost of manual labour and of manure is reduced to a minimum, every lunatic asylum may exonerate the department which has established it from the expense of its pauper lunatics, provided that such a sufficient extent of land be allotted to it as may, by its cultivation, produce a revenue equivalent to the expenditure incurred in their behalf.

In establishing this proposition the author calculates that, after eliminating the cost of labour and of manure from the charges of cultivation, the profit remaining would be at least 15 per cent.; and in this estimate he states he has the concurrence of some of the best practical farmers in his district. But, he rightly subjoins, the amount of profit must vary according to that of capital invested, as regulated by the value of the land and its fertility, and according to the number of lunatics.

To M. Ferrus, says Dr. Billod, is the honour of having been the first to attempt the institution of an agricultural colony, *viz.*, the farm of St. Anne, near Paris, as a supplementary institution to the Bicêtre. This farm comprises about 100 acres; these are cultivated by patients drafted from the Bicêtre, others of whom are occupied in a large laundry and fulling-mill attached to the farm. The revenue of this industrial establishment increased from 1957 francs in 1833, to 53,349 in 1841. In this account of St. Anne's farm M. Billod has forgotten to mention the extensive piggeries attached, from which, in fact, the best portion of its proceeds is derived.

But the most considerable and the most successful attempt at colonisation in a locality apart from an asylum has been made by the brothers Labitte, the proprietors of a large private receptacle for the insane at Clermont, in the now well-known colony of St. James, which forms an annexe at some distance from that institution. This colony represents in principle the scheme M. Billod contends for. He would have a large farm at some distance from the district asylum, though dependent on it for its medical service and general administration. The adoption of the system within the immediate vicinity of an existing asylum would, he says, necessarily place the authorities very much at the mercy of the surrounding landed proprietors, and put them to a much greater cost for the purchase of the additional land required than if it were carried out at a distance

from it. Moreover, the separation of the annexe would have the advantages of dis severing the mind more completely than the asylum precincts could do from its disordered feelings, of lessening the ideas of confinement and of restriction of liberty, and of surrounding the inmates with conditions more akin to those of ordinary life.

If from any cause the purchase of land were thought undesirable or were impracticable, the rental of a sufficient area for cultivation would be found a profitable investment. Another benefit would accrue from the agricultural colonisation scheme, viz., the practicability of usefully and beneficially employing the idiots and mere imbeciles, who either uselessly crowd lunatic asylums, or are excluded from them, as is generally the case in France, as inadmissible, or are miserably located, as in England, in workhouse wards.

M. Billod, though advocating this so-called colonisation scheme, nevertheless disapproves of the system as carried out at Gheel, and would oppose its introduction into France.

Before concluding his essay M. Billod addresses himself to the question of the distribution of the large number of lunatics in the department of the Seine, and insists on the evils attendant on the plan hitherto pursued, of sending those who could not find accommodation in the asylums of the department to the provincial institutions. But, he remarks, it was better in the mean time, and until a proper scheme of accommodation could be matured and carried out, to do this than prejudge the question by ill-contrived additions to overgrown asylums, as has been done by the magistrates of Middlesex in the case of Hanwell and Colney Hatch. And it is gratifying to find that M. Billod has convinced himself that his "honorables confrères" on this side the channel have had no hand in the adoption of so absurd a proceeding.

Now, there can be no question that an agricultural establishment after the model M. Billod places before us would be of immense benefit to numerous patients in an asylum, to the asylum authorities and administration, and to the ratepayers taxed for its support. As a rule, the profitable employment of their inmates in farming and other industrial pursuits has been much more widely carried out in Great Britain than in France, and the Lunacy Commissioners have been foremost in enforcing the acquisition of a fair extent of land in connexion with our asylums; and we hope to see the day when the system of aggregating vast numbers of insane in huge, unwieldy buildings shall be laid aside, and be replaced by the creation of annexes, having the character of village communities, with ample land for the full and profitable occupation of their inhabitants. But we must express our doubts whether the notion that by agricultural colonies of insane, the cost of the maintenance, and that of the asylum of which they would form appendages, could be covered by profits accruing from them, is not Utopian. Mr. Hill, of the York

Asylum has apparently pushed the employment of patients' labour as far as practicable; yet, although the returns obtained by him materially diminish the cost of maintenance on the whole number of inmates, they are very far from covering it. And in dealing with such a question, it must not be forgotten that the residents in an asylum are *patients*, and cannot be systematically and regularly put to labour, for their forced subjection to work would represent a new form of coercion in exchange for the mechanical restraint which it has taken so many years to abolish. M. Billod has, moreover, reckoned on a constant 15 per cent. profit; but this is to suppose a farmer's paradise, where weather is always propitious, crops always good, blight and disease unknown among crops and cattle, market prices at a fixed and profitable figure, and labour always equal to the demand.

Nevertheless, though the advocacy of a pet project has led M. Billod to see only its fair side, unmarred by any drawbacks, the general principle of his scheme is good, and the publication of his brochure very opportune in the present dilemma of deciding how to provide for our insane population.

8. In re *Non-restraint*.—*Casimir Pinel v. Conolly*.

("Examen du Non-restraint." 'Journal de Medicine Mentale,' 1862.)

In 1860 M. Morel, who had been despatched by the authorities of the department of the Seine Inférieure to examine the English asylums, with particular reference to the abolition of coercion in the treatment of the insane, published an account of his observations and conclusions, highly favorable to English opinion and practice, and calculated to remove many prejudices against the non-restraint system, as pursued in our country, and to promote its adoption in the asylums of France. This work, by M. Morel, has, no doubt, become familiar to very many of our readers, whilst, on the other hand, its extent and importance render an abstract suitable to this paper impracticable.

Our attention has been called again to this essay just now because it seems to have aroused the wrath of Dr. Casimir Pinel, which, as he informs us in his "Examen du Non-restraint," contributed to the 'Journal de Médecine Mentale,' 1862, has been bottled up in a written but unpublished work since 1856, then called into that immature state of existence by the appearance of Dr. Conolly's work on 'The Treatment of the Insane without Mechanical Restraints.' That his laboured MS. folios should be altogether lost to the world was, no doubt, a painful thought for their writer, and consequently M. Morel's book presented the opportunity, and the pages of the journal the means, to rescue them from oblivion.

M. Pinel tells us, in his introductory remarks, that he has read M. Morel's book with great interest ; but if so, he has failed both to cull from it the instruction he might have obtained, and to dissipate a single prejudice and misconception from his mind which he aforetime entertained when he wrote his manuscript in 1856. In fact, we are disposed to believe that M. Pinel was determined to abide by his preconceived opinions, and to publish his otherwise lost labour to the world, with all its obsolete objections and mistaken notions intact ; for on reading through his series of papers we find scarcely any reference to M. Morel's work, although plenty of errors and prejudices which would not have appeared, had he read that work with a view to his own profit and to correct his judgment, in his now published critique. Non-restraint and Dr. Conolly are the objects of his attack, and from the manner in which he deals his blows at the latter, one might suppose he had some personal feeling against him. The only possible interpretation for this seeming animus against our English physician, and his claims as a benefactor of the insane, is that of an ill-judged jealousy for the honour and merits of the great Pinel, whose ever-esteemed name he has the good fortune to bear. But we doubt not the shade of his distinguished ancestor would be greatly provoked by such a purposeless and frivolous onslaught on an eminent man, who has ever recognised the great claims of the first Pinel, and been proud, as his disciple, to develop the principles of humane treatment of the insane he so ably propounded.

To proceed. After announcing his unborn work, M. Casimir Pinel has the audacity to remark that his opinion, which he tells us coincided with that also of most alienists, was that "M. Conolly had added nothing to what was practised in France for more than half a century" before he wrote ; and to this statement he presently subjoins that "non-restraint dates" in England from 1839, and that up to that period the situation of our insane was most deplorable, and that no change had taken place in the "old regime of damp dungeons, chains, handcuffs, &c." To remedy this state of things, he says, Dr. Conolly meritoriously took the initiative in England, and he then endeavours to prove that that eminent physician has no claim to any originality in opinion or in action in the reforms he advocated and carried out, but that he was only a feeble copyist of the brilliant examples exhibited in the treatment of the insane in the asylums of France since the days of the illustrious Pinel.

It is astonishing to find a physician at the present day venturing upon such opinions and statements, in direct opposition, as they are, to facts recognised by every one conversant with the history and progress of the moral treatment of the insane. Such a proceeding indicates a wilful perversion of historical facts, and cannot be too severely reprobated.

The object of his first chapter is to derogate from Dr. Conolly all

honour as an originator of improvements in the treatment of the insane, and his first reference is to the teachings of Soranus and of Cælius Aurelianus. All honour, we say, to these ancient preachers of humanity to the insane; but what effect had their teachings on the practice of their contemporaries and of succeeding generations? And, again, what advance in moral or in physical science has not been shadowed forth by the doctrines and discoveries of sages of a by-gone age?

But it is to his distinguished ancestor's (Ph. Pinel) works that the writer principally refers, in order to substantiate his statement that Conolly originated nothing new, and he quotes several passages from them, which certainly prove how wise and humane were the ideas promulgated by Pinel, and how far he stood in advance of his time. But surely this was an act of supererogation, for neither Dr. Conolly nor any other sane man questions in the least the paramount merits of Pinel, as the great reformer of his age in the treatment of lunatics. And, on the other hand, these quotations certainly do not prove that the reforms he so ably promoted have not been further developed and extended, both by Conolly and other well-known physicians.

There are few at the present epoch who would coincide with Casimir Pinel in asserting that the management of the insane and the amount of coercion proposed by the elder Pinel were the *ne plus ultra* in perfection; that his system represents that sensible and judicious non-restraint beyond which the condition of lunatics does not permit an extension; and that the camisole, mechanical confinement in bed, seclusion, and the douche, must ever be continued as means necessary to their salutary treatment. Indeed, it must be evident to every unprejudiced thinker that, if to Pinel the great merit be due of striking off the chains of the lunatic, of reducing mechanical means of restraint to a comparatively mild character, of claiming for the lunatic his position as the subject of disease and not as a malefactor, and of demanding for him a mode of treatment fitted to him as a being still amenable to kindness, and in need of the same hygienic care as a sane man, to Dr. Conolly also is due the merit of demonstrating that coercion is not essential as a means of treatment, and that lunatics can be employed, clothed, amused, and dealt with generally, as ordinary individuals, to a much greater extent than Pinel supposed to be practicable. To Dr. Conolly belongs the credit of declaiming against mechanical restraint as always an *evil*, which ought to be eradicated from the means of control in use; of devising various expedients in the way of dress, bedding, &c., to meet those difficulties in treatment which served as apologies for mechanical coercion; and, above all, of replacing such coercion by minute supervision and by untiring care and forethought. In short, he was foremost in developing that state and condition, that *tout ensemble* of asylum management, which M. Morel so clearly recognised and so justly

appreciated in his able memoir above quoted, whereby alone non-restraint becomes practicable and salutary.

It is by having been mainly instrumental in effecting this transition, thus rudely sketched, that Dr. Conolly, as we maintain, did materially add to the principles of treatment as advocated by the great Pinel, and as put into practice in France prior to the time when non-restraint became the watchword of English asylum superintendents under the leadership of Conolly. Unluckily, indeed, the advance made has been of slower progress in France, for it was there for a long time misunderstood and misrepresented, but now its practicability is becoming widely admitted, and, as a consequence, it bids fair to be soon generally adopted. Taking into consideration the record of opinions of French asylum physicians, as collected by M. Morel, on the subject of restraint, and the principles and practice of the best known alienists of France, and amongst them M. Girard de Cailleux, as set forth in published works, we are at a loss to know how M. Casimir Pinel can substantiate the assertion he puts forth, that the *majority* concur in his views, and that even those who know what is going on in England are unanimous in denying the possibility of the entire abolition of mechanical coercion. How can he explain his statement that not even M. Morel believes in the practicability of the total abolition of restraint, when the whole tenor of that physician's book on the subject irrefragably proves that he has witnessed and has convinced himself of the practicability, and when, as at p. 79, he writes "that he has definitely adopted the resolution" to lay aside the use of restraint, and at p. 104 speaks of the total abolition of all means of coercion in the treatment of the insane, as the great object to be realised. But M. Casimir Pinel cares little for the accuracy of his statements, as an examination of his whole paper proves. What but the most profound ignorance or premeditated misrepresentation is evidenced in the following remarks, that in 1834, when M. Ferrus wrote his sketch of English asylums, "England had not modified its system (of treatment). It was still in irons and handcuffs;" that until 1839 "nothing had been changed from the old regime of damp dungeons, chains, and manacles;" and that, as the general deduction from all his quotations and observations, the asylums of France were in the intervening period most admirably managed and their inmates most happily lodged and cared for, offering in all these particulars a most marked contrast with what existed in England. The reform, as effected by the first Pinel, is, as we have already seen, the model held forth to us, and the Salpêtrière and Bicêtre the institutions *par excellence* for our admiration, as exhibiting all those qualities so lamentably deficient in our English asylums until 1839. But we would call M. Casimir Pinel's attention to the grave defects indicated by Esquirol and Ferrus in the models he would submit to our admiration, and to the present valuation placed upon them in the

recent report made to the Prefect of the Seine on the unfitness of the Salpêtrière and the Bicêtre as asylums for the insane. Moreover, he should inform himself of the state of the asylums and of their inmates in France generally, as told by Esquirol and Ferrus, at the period he draws such a dark picture of those in England. If he is honest in his inquiries, he will find that long since 1839 the condition of the insane in many provincial asylums of France has been most unsatisfactory, and the buildings themselves altogether unfit for their purpose. He will discover, too, that the humane doctrines of his illustrious progenitor were slowly received and acted upon in the French provinces, and that restraint chairs, iron rings, handcuffs, and other instruments of coercion, in addition to his much-beloved camisole, dark and damp cells, insufficient food and clothing, and many remnants of barbarous treatment, lingered in use long since 1839. We can likewise, from our own personal observation of many French provincial asylums, testify that in 1855 the condition of the insane, the abuse of restraint, and the accommodation provided, were in some of them equally bad, and in many particulars worse, than in the worst English asylums in 1839.

But not only has M. Casimir Pinel withheld all notices of an unfavorable condition of things in French asylums at the period of the history of which he professes to give a sketch, but he has implied generally the absence of special institutions for the insane in England, and has altogether ignored what Esquirol, Ferrus, Parchappe and others have mentioned approvingly respecting them and their inmates. Ferrus (writing in 1834) at p. 64 of this work '*Des Aliénés*,' remarks, by way of comment on the activity displayed in England towards providing for the insane after the Act of Parliament of 1827, how happy it would be for France if, by a similar measure, the lunatics of the departments could be withdrawn from the public gaze and from brutal treatment without being exposed to the horrors of dungeons, and could they be transferred to suitable places of treatment. But before proceeding with quotations from M. Ferrus, we must state, in justice to English asylums in 1834, when his work appeared, that his notes apply to the state of things in 1826, when he made his visit to this country, and consequently, by reason of many ameliorations carried out in the eight years' interval, do not fairly represent their condition at the date he wrote. Still, on this very account, the remarks of M. Ferrus on the comparative state of French and English asylums are of more weight in dealing with the unfair representations of M. Casimir Pinel.

Now, though M. Ferrus has to complain of the prison-like models after which the asylums existing in England in 1826 were constructed, of their consequent heaviness of appearance and the contracted spaces allotted for exercise out of doors, of the excessive restraint in use by chains or other fastenings and of the want of baths

and of classification, yet he found many things to commend, and to recommend for adoption in the similar institutions of his native country. For instance, he refers approvingly to the greater attention given in England to warming the buildings, to thoroughly drying the linen worn by patients, to the better clothing and diet afforded them, to their more extended employment, to the opportunities given them for religious worship, and to the better remuneration of their attendants. Lastly, M. Ferrus has the following complimentary paragraph—that “he cannot too often repeat, as the result of his examination of English establishments and of his own practice, that the most efficacious means of treating the insane at the commencement of their attack are, order, kindness coupled with firmness, diversions, and, at a later period, work.”

It is further proper to remind M. Casimir Pinel that the wants of the insane, as elucidated by his distinguished ancestor, were more largely and thoroughly appreciated in this country than in France, and were sooner met by the erection of suitable asylums for their care and treatment. In 1826, when M. Ferrus inspected them, the English asylums were few in number, and were some of them soon afterwards much improved; but in 1839, when our author would intimate the condition of the insane was first cared for in England, their number was very considerably augmented, whilst in France comparatively few specially constructed buildings were to be found. Moreover, at this date many and great improvements, both in detail of construction and of internal management, had been effected. The employment of patients in various trades and occupations had even then been extended beyond what the first Pinel had suggested. Indeed, the idea of employing the insane usefully, and as a means of treatment, had been broached and acted upon in the Friends' Retreat, at York, before Pinel's teachings had reached this country. Moreover, at this last-named institution the use of chains to restrain and of corporeal punishment of the insane were, at an equally early period, interdicted. In fact, if we look through the works of several old English physicians on insanity, we can discover many of the humane and true principles of treatment so forcibly and eloquently propounded by Pinel clearly recognised and enforced.

In conclusion, we are compelled to admit that a considerable amount of restraint was in use until Dr. Conolly commenced his attack on its employment in 1839. But was there more at that date than in France, where Dr. Casimir Pinel tells us the principles and practice enforced by Dr. Conolly had been in operation fifty years before this zealous reformer commenced his operations? The value of the assertion we have already examined by reference to the descriptions of French asylums, and of their practice, given by French physicians, and the same reference furnishes an answer to the question of the relative prevalence of mechanical coercion in France and in

England in 1839. We hesitate not to affirm that in this year named, and prior as well as subsequent to it, mechanical restraint had been much more extensively resorted to in France than in England. The mode in which the coercion was applied is of secondary consequence. The melodramatic effect to be got by talking of the clanking of chains is made much of by M. C. Pinel, and chains are represented as peculiar to England since the days of his great ancestor. However, if he will read his countrymen's account of French asylums, he will find England enjoyed no monopoly in such instruments of restraint during the period in question. Unluckily for English reputation, such appliances were most in use formerly in Bethlem and St. Luke's Hospitals—institutions which, from their metropolitan position and more ancient foundation, were best known to foreigners, and looked upon by them rather as model English institutions for lunatics. Again, our asylum superintendents formerly preferred, in general, an apparatus of steel rings to fix the hands by means of belts attached to the waist, or to link the feet together, to the camisole, as employed in France, to the use of which they found many objections. It is not our intention, however, here to go into the relative merits of the two sorts of restraint; both are now condemned as bad, and few English physicians will appreciate the great merits which the camisole evidently possesses in the eyes of M. Casimir Pinel over the rude rings and straps of our forefathers.

Perhaps we have devoted too much time and attention to the shallow and ill-inspired paper criticised, yet it seemed to us that its statements should not go forth unchallenged, and that Dr. Conolly's merits should be redeemed from the obloquy sought to be cast upon them. Had it been necessary, we could have shown the initiative taken by England in the construction of specially adapted buildings for lunatics, on the influence of its example on French asylums, on management, and on treatment, and on the influence of English legislation in lunacy on that of France.

Death of Professor Ideler.

Among events deserving notice in a psychological record is the death of Prof. Ideler, of Berlin, who held, as chief physician of the section for the insane at the large "Charité" Hospital of Berlin, and as a copious writer, a distinguished place, particularly in Germany, in the professional world. He was born in 1795, and in his early medical career, from 1815 to 1821, was a surgeon in the Prussian army. On leaving the army he entered into practice in one or two small towns, but his ambition led him ultimately to Berlin, and to bring himself into notice he wrote, in 1826, a work on 'Anthropology for Medical Men.' Langermann brought him forward, and directed his attention to psychology, and he soon made himself famous by his celebrated treatise on 'General Dietetics,' and by the

comprehensive 'Grundriss der Seelenheilkunde.' His last considerable work was the 'Treatise on Judicial Psychology,' published in 1857. During the last few years of his life he was a prey to hypochondriasis, and succumbed at the close of last July to an apoplectic seizure.

He occupied a chair in the University of Berlin from the year 1840, and gave public clinical lectures, in summer, on dietetics, and in winter on the treatment of insanity. Many of the lectures on the latter subject have from time to time appeared in the 'Annalen des Charité-Krankenhauses.'

His countrymen assign Ideler a high place among those who have advanced the pathology and treatment of the insane, particularly at that period when the practices of past barbarous ages were first in course of being expelled from the German asylums. However, Ideler did not follow far in the wake of the great Pinel, as regards the moral treatment of the insane. A great amount of restraint, and little amusement, exercise, or occupation, fell to the lot of the inmates of the insane wards of the Charité Hospital. Those wards, occupying part of the same building with others devoted to syphilitic cases, were built as a detached wing to the general hospital, but on the same plot of ground, and were most unfit abodes for lunatic patients. It might be supposed that the great influence of Ideler might have secured the construction of a suitable asylum for the insane of the capital of Prussia; but we fear he did not fully appreciate the teachings of modern psychologists respecting the wants of the insane, and retained many practices and opinions exploded in almost every other asylum in Germany, France, and England. From our own observation of the Berlin insane wards, we can speak to the extensive employment of restraint by various means, and to the severe system of forcible douches, administered in a manner and in a degree unseen in any other hospital for lunatics, and certainly very contrary to the present accepted ideas of what is suited for the insane. However, with all his errors in opinion and practice, Ideler deserved well of his country, and will for many years be remembered for the many good works he has done.

'*The American Quarterly Journal of Insanity*,' 1862.

This journal is sufficiently well known to most of our readers by reputation, if not by an acquaintance with its pages. It is comparatively an old established periodical, published quarterly, and has now reached its eighteenth volume. Various excellent original articles have appeared in it from the pen of many of the distinguished asylum superintendents of America; but the reprinting *in toto*, or in abstract and translations, of papers previously published in various European periodicals, has always constituted a more prominent feature of this American journal.

We have now three parts before us, which might furnish several subjects for analysis, but, owing to the length to which this paper has already extended, we will confine ourselves to a brief but important communication from Dr. Workman, of the Toronto Asylum, Canada, and to the record of a Will case, having important bearings.

9. *Cases of Fracture of the Ribs in Insane Patients, revealed by Post-mortem Examination.*

(*'American Journal of Insanity,'* April, 1862.)

The writer first notices a case reported by Dr. Gray, of the New York State Asylum, Utica, and remarks that he is "fully persuaded that such cases (of fractured ribs) are of more frequent occurrence than may yet have been apprehended. The absence of all the symptoms ordinarily resulting from fracture of the ribs or sternum, and the final supervention of others having no apparent relation to the previous condition of the patient, are abundantly adequate to the induction of erroneous diagnosis. So far as I am aware, the existence of thoracic injury in cases similar to that recorded by Dr. Gray has in no instance yet recorded been inspected prior to death, and has first come to light only through post-mortem examination. This fact sufficiently warrants the belief that we have not yet become so familiar with these casualties as we might have been, and as certainly, for our own safety, we should be."

Dr. Workman then goes on to remark on the little value of the opinion of surgeons unacquainted with the insane, when given in evidence of what, from the injury discovered, they assume, from the general symptomatology given in books and from their experience in some individuals, to have been its cause, its necessary characters, and the date of its occurrence.

Except the medical public generally acquire correct notions respecting the peculiarities of disease and injury in the insane, "how," asks the writer, "can we hope (as alienists) to protect ourselves from the fallacies of their testimony, whether before the tribunals of justice or the more terrible ordeal of public judgment—a court whose revisions of error hardly ever come in time to reinstate its victims in the position of innocent, much less of meritorious, men?"

Dr. Workman quotes a case recorded by Dr. Smith, of the Durham Asylum, in his report for 1860, and refers to other cases of fractured ribs occurring at Colney Hatch and elsewhere. His general deduction is, that the most formidable disease may exist in the insane without any of the usual symptoms, and that death may occur among them without a cause apparent to the physician. "The only reliable basis of correct diagnosis in the bodily ailments of our patients is that which is deduced from constant autopsical research." Acting on this opinion, he has, in all cases where the true pathology

was not evident, made post-mortem examinations, and has met with two instances where the ribs were fractured, though in neither of them, up to the time of death, was there present "any symptom which indicated broken ribs, nor, indeed, any other form of chest disease, with the exception of œdema of the feet and legs in one, and this condition appeared only four days prior to death." The first case occurred to Dr. Workman in 1859. The man was thirty-three years of age, and "reported before admission to be a furious and dangerous lunatic. On admission he was pale, as if from inanition and want of sleep. He was restless, noisy, and destructive at first, but in the course of three weeks became quiet and harmless, took food well, and appeared to rest well at night. He complained of no pain whatever, and had no cough." On the thirty-third day after admission œdema of feet was noticed; this extended upwards, and on the third day after, hydrothorax was evident, and he died the next day. After death the left thorax was filled with water, the right thorax was half full, and about three ounces existed in the pericardium. In the abdomen also there was effusion. Seven ribs were found fractured, and presented very imperfect marks of restorative action. The condition of the broken ends, and the whole appearance of adjacent parts, proved satisfactorily that the fractures were of a date more remote than that of his admission." The brain was highly congested, and the lateral ventricles contained about an ounce and a half of serum.

The second case was that of a tall, powerful man, labouring under general paralysis, admitted December 17th, 1861, and certified to have been insane for only eight weeks previously. He was noisy, had no pain, appetite keen. He continued to go about until six days before his death, when, from an apparent aggravation of his paralytic condition, he was kept in bed. He gradually became more feeble, but had no coma, and could swallow, though with difficulty, until a few hours before his death, which took place on the forty-ninth day from his admission.

Not the slightest suspicion was entertained of any thoracic injury; but on dissecting the right side, a deposit of dark pus was found at two points beneath the pectoralis major, and beneath these were the fractures, occupying the first, second, third, and fourth ribs, about an inch from their cartilaginous ends. "Scarcely a single pus-globule was discernible, so that the deposit could not have been recent. No separation had taken place. The right pleura was adherent to the fourth rib. The fractures ranged in a straight line, as if all caused by one blow, or most probably by a fall on some hard-edged substance. In neither side of the thorax was there any deposit of serum worthy of notice, and the lungs were both healthy. The pericardium contained about three ounces of serum, and the heart presented partial fatty degeneration. The scalp showed an old cicatrix, about an inch and a half from and behind the anterior

fontanelle. The dura mater was adherent to the skull from the anterior fontanelle backward over the whole summit, and also to the brain from the same point backward, along the great fissure, about one and one fourth inch on each side. A considerable quantity of fluid was diffused over the whole brain, beneath the pia mater. The meningeal vessels were considerably congested, but slices of the brain, under the microscope, showed little vascularity. There was general œdema of the brain substance, and it had this form of softening only. On the base of the brain fully three ounces of serum were found, and behind the tentorium about one ounce."

In the first case death was the result of asphyxia from hydrothorax, in the second it was referable to the brain.

The following is Dr. Workman's practical commentary, with a piece of advice forcibly, if not courteously, expressed:—"Now," he writes, "should any eminent medical gentleman, as in the Colney Hatch case, allege that my two patients could not have had fractured ribs, even for 'three days, without exhibiting very distressing symptoms, which could not have been masked,' I should feel irresistibly inclined to advise him not to make an ass of himself, and I am sure there is not an asylum superintendent in Europe or America who would not concur in the propriety of this advice. 'Eminent medical gentlemen,' who have not spent their lives in the practical study of insanity, would act very prudently in abstaining from rash deliverances in all questions relating to the malady, in which they find themselves in antagonism with those better qualified to give a correct opinion."

10. *The "Parish" Will Case.*

(*'American Journal of Insanity,'* October, 1862.)

Under this name is well known a "cause célèbre" recently decided in the Court of Appeal in New York, after protracted litigation. The proceedings in the case have been published in two volumes, in one of which the written report and opinion of one witness, Dr. John Watson, of New York, occupies 350 pages. The history and bearings of the case are very well discussed in the '*American Journal of Insanity*,' and from this source we shall make a brief abstract, believing that some features in the case, and the modification of the accepted definition of incompetence in a testator adopted, will render a notice of it acceptable to our readers.

Mr. Parish was a successful merchant of New York, and in 1842, having amassed a fortune of 732,879 dollars, made a will, bequeathing nearly one half to his wife, 20,000 each to two sisters, and various legacies amounting to 290,000, of which 85,000 were distributed among his wife's relations, and leaving his two brothers, James and Daniel, residuary legatees, with a special legacy of 10,000

dollars to Daniel, as executor. At the time of executing this will Mr. Parish was fifty-four years of age, in good health, and in the full possession of all his faculties. He had no child, and none was ever borne to him. The will was made after much deliberation and frequent consultations with his legal adviser.

During the seven years ensuing his property was much increased, and several legacies lapsed by the death of legatees, children of his brother James. By the will, consequently, this increase fell to the benefit of the residuary legatees, a fact of which Mr. Parish was fully aware, and properly informed of by his legal adviser; however, up to 1849, when he was seized with apoplexy, he evinced no intention of altering his will. On July 19th, 1849, he had apoplexy, and whether after this attack he ever possessed testamentary capacity was the chief point at issue in the case.

On the 29th of August, 1849, Mr. Parish executed a codicil, prepared at the suggestion of his wife, by which she became devisee of real estate valued at 200,000 dollars. This codicil was re-executed on the 17th of December of the same year. In September, 1853, in accordance with instructions from Mrs. Parish, a second codicil was made, incorporating the first, by which, in addition to the former bequests, she became legatee of personal property to the value of 349,460, and 50,000 were bequeathed to charitable institutions. In this codicil the appointment of Daniel Parish as executor was revoked, and also the legacy of 10,000 given him by the will. On June 15th, 1854, a third codicil was prepared, also at Mrs. Parish's suggestion, and executed as before, by which the testator revoked the residuary devise to his brothers, and substituted his wife as devisee of the whole remainder of the estate.

Mr. Parish died March 2nd, 1856. From the time of his attack in 1849 to his decease, his wife was scarcely ever absent from his presence, and she and her relations were his constant attendants, to the almost entire exclusion of his own relatives, between whom and himself, up to this period, there had never been any manifestation of hostility, or indication of a want of mutual family affection.

Shortly after his death the will and codicils were offered for probate before the Surrogate of New York; and, after a long hearing, the will and first codicil were admitted to probate, but the second and third codicils were rejected. This decree was affirmed at a general term of the Supreme Court, and the Court of Appeals has sustained that decision.

The greater part of the evidence taken had necessarily reference to the mental condition of Mr. Parish. He had threatenings of cerebral disturbance for several years before the apoplectic fit in 1849, and had hereditary tendency to disorders of that nature. The shock of this final attack rendered him insensible and convulsed for several hours, and ended in hemiplegia of the right side. His

strength improved, he regained some use of his right leg, and during the remaining seven years he enjoyed good but not uninterrupted health, the hemiplegia remaining. He suffered from a severe and painful disease of the bowels in October, 1849; subsequently had a number of attacks, supposed to depend on the cerebral lesion, and among others one or more severe attacks of cholera morbus (?), one or more of inflammation of the lungs, and an abscess under the jaw, which for a time, by its size, threatened suffocation.

In addition to these disorders, even after his apoplectic attack, Mr. Parish was subject, at irregular intervals, extending from one or two weeks to six months and even a year, to spasms or convulsions, preceded by despondency and irritability, though after they had passed off he was generally better and brighter than before. The convulsions are described as usually coming on suddenly, with a noise in the throat, resembling a shriek or scream, a violent reddening of the face, and a convulsion of the whole body, the muscles becoming alternately rigid and relaxed. Some of these paroxysms were so violent as seriously to threaten a fatal result. The main feature of the final illness was congestion of the lungs, complicated in his physicians' opinions, as were likewise the other diseases he suffered, with disorder dependent on the condition of the brain.

From his first attack his speech was virtually lost, for he could never afterwards utter more than a few monosyllables, principally "yes" and "no," and there is even great doubt whether he ever uttered them intelligibly. He expressed himself mostly by inarticulate sounds, accompanied by motions and gestures of the left hand and arm, and by nodding or shaking the head. The external senses, excepting eyesight, which was always more or less imperfect, were not seriously affected.

He would occasionally look at books and papers, but the preponderating evidence was that he could not read at all. He was also regularly read to by his wife's directions, but it could not be proved that he was interested in, or comprehended what was read. An attempt to teach him to write with his left hand failed; block letters were procured, but he pushed them away, and he never adopted the use of a dictionary obtained for him to communicate his ideas.

Subsequently to the attack he was never intrusted with the management of his own affairs, nor allowed to have money in his possession. He could not supply his own wants, and was washed, dressed, and attended to like a child, and was frequently unable to control his evacuations. His wishes, as might be expected, were not easily ascertained, for the inarticulate sounds, and the gestures conveying them, could only be interpreted by various suggestions of his attendants, varied until they assumed his wish complied with, though it would often happen that it was utterly impossible to compre-

hend him at all, and the attempt would be abandoned by both parties. He would also assent to contradictory suggestions.

Before his attack Mr. Parish is described by his relatives and acquaintances as a "placid and unexcitable man," of great self-respect, and with great command of temper; "his manners were mild, gentle, and unruffled;" a quiet, undemonstrative gentleman, rarely exhibiting any emotion, and deeply absorbed in his commercial transactions. After his attack he manifested a marked change of disposition; he occasionally shed tears; he became petulant, and frequently violent, and in several instances exhibited a want of appreciation of the requirements of decorum and even of decency. He had occasional unmeaning freaks and caprices, such as searching for his clothes in impossible places, going out to see the moon, and making excursions to the garret and the cellar for no ascertained purpose, and it sometimes became necessary to use physical force to prevent him from undertakings which threatened personal safety.

He exhibited some recollection of his former daily and familiar places of resort and of his former habits of business, which he would attempt, in trifling matters, to resume, as by pulling out his watch when he passed the City Hall clock, or insisting, when driven out, upon being taken to the bank of which he was once a director, or to his old office, or to various tradesmen with whom he had been in the habit of dealing. In support of the codicils an attempt was also made to show that his intellect was never materially impaired, but the instances adduced in evidence were trivial.

In regard to the actual execution of the codicils, it seemed that the counsel employed to prepare them read them to Mr. Parish in the presence of the subscribing witnesses, put to him the requisite formal questions, and received from him, by sound and gesture, as usual, what were supposed to be affirmative replies. The counsel then assisted Mr. Parish by guiding his hand while he made his mark. At least this was the case with the first and second codicils; there was no evidence whatever whether or not he received assistance in making his mark at the execution of the third.

Such were the main points of the case presented to the Court of Appeals. The opinion of the court was delivered by Judge Davies, from which we quote the comments upon the facts narrated, and the conclusions in which the majority of the court concurred.

After adverting to the change in Mr. Parish's disposition subsequently to his attack, Judge Davies says—"How diametrically opposite to the previous conduct of his whole life is that now exhibited, and the inquiry forces itself upon the mind, what cause has produced these results? Can such totally inconsistent and opposite characters be reconciled with the theories that the faculties, the mind, and moral perceptions of Mr. Parish underwent no change, but were the same after July 19th, 1849, as they were before that

day?.....We confess ourselves totally unable to assent to any such theory. The conviction on our mind is clear that these facts and circumstances show unerringly that the attack of July the 19th obliterated the mental powers, the moral perceptions, the refined and gentle susceptibilities of Henry Parish. He then ceased to be Henry Parish, and was no longer an accountable being." Upon the point of Mr. Parish's method of communicating his ideas, Judge Davies says—"With these imperfect media for ascertaining the thoughts of Mr. Parish, it is doing no injustice to any one to assume that they have been mistaken when they supposed they correctly understood him." Great difficulty was found by all in understanding his wishes and thoughts, even if understood at all, "and the instances are frequent and clearly established where he often made an affirmative and a negative motion of his head immediately succeeding each other, to the same question, leaving the inquirer in perplexity which he really intended." In reply to his indications of wants, suggestions were put on various topics by those around him, and construed according to their suppositions of his answers to them. "If Mr. Parish had no power to express a wish to destroy a will, it follows he had none to create one, and the manifestations of his wishes depended *entirely upon the interpreter and the integrity of the interpretation*. It is thus seen that great difficulty and uncertainty, to say the least of it, attended any expression of the thoughts or wishes of Mr. Parish, and that a large number of those having business or intercourse with him utterly failed to attach or obtain any meaning to his signs, sounds, motions, or gestures. The natural and obvious deductions to be made from all these facts and circumstances are, that Mr. Parish had no ideas to communicate, or if he had any, that the means of doing so, with certainty and beyond all cavil and doubt, were denied to him." Referring further to this inability to communicate with others, the learned judge repeats that after July 19th, 1849, his intellectual powers were so obliterated that "after that period he was not a man of sound mind and memory within the meaning and language of the statute, and was therefore incompetent to make a will. It is not the duty of the court to strain after probate, and especially to seek to establish a posterior will, made in conceded feeble health, unsustained by previous declaration of intention, over a prior will, made in health, and with care and deliberation, when the provisions of the posterior will are in direct hostility and conflict with those of the prior one. It would be in violation of long and well-established principles, and an almost uniform and unbroken current of decision in England and in this country, to admit to probate testamentary papers prepared and executed under the circumstances these were, by a man who was in apparent full physical health, and possessing nearly his natural strength, who could not or would not write, who

could not or would not speak, who could not or would not use the letters of the alphabet or even a dictionary, for the purpose of conveying his wishes, upon proof solely that they were supposed to express the testator's wishes, from signs, gestures, and motions made by him, and especially when it appeared that such signs, gestures, and motions made by him were often contradictory, uncertain, frequently misunderstood, and often not comprehended at all."

Judge Davies states at length the three principles of law which he conceived to be applicable to the case. The first regards testamentary capacity, the second the burden of proof, the third the maxim "*qui se scripsit, heredem.*" The chief interest and importance attaching to the decision turn upon the discussion of the first of these—the doctrine of testamentary capacity. The writer in the 'American Journal of Insanity' examines this last point in reference to the opinions and decisions of various legal authorities and decisions in courts, English and American, and remarks that "almost the whole weight of argument derived from the modern decisions in England and in our sister states is upon the side of the rule stated by Judge Davies, and supported by the authority of such jurists as Sir John Nicoll, Lord Kenyon, Dr. Lushington, Lord Erskine, and Chancellor Walworth."

The *Lispenard* case, decided in the Court of Errors in 1841 (26 Wend., 255), had hitherto been held of binding authority; in this case the argument allowed was based on the interpretation of the words "non-sane memory" in the English Statute of Wills, and on the interpretation of some older authorities that one was not accounted to have "wholly lost his understanding" until he became an idiot, so that he could not tell his own name or count twenty," and that therefore any one possessing a higher degree of intelligence than this was not "non compos mentis," and was not disabled from making a will. The result of the *Parish* decision is to supplant this too strict interpretation of the early authorities, which is manifestly absurd when viewed by the light of modern inquiry and knowledge of mental disease.

The following remarks are very just:—"While, however, the position assumed in the *Lispenard* case has been abandoned, the courts, in the absence of any suspicion, would doubtless require proof of a very low degree of capacity before setting aside a will *on that ground alone*. But in stating *what* degree of mental alienation will avoid a will, we are confronted by a difficulty inherent in the very nature of the subject. In fact, no accurate test can be given by which to gauge the understanding. . . . The *Parish* will case, therefore, while it lays down a more rational rule for deciding questions of testamentary capacity than that previously established, is, perhaps, more important as overthrowing the arbitrary standard of the old rule than as erecting another."

In this well-fought Will case opinions were given by Dr. John Watson, of New York; the late Dr. Luther V. Bell, Charlestown, Mass.; Dr. Isaac Ray, of the Butler Hospital; Dr. D. T. Brown, of Bloomingdale Asylum; Dr. Pliny Earle, and Dr. M. H. Ranney, of New York City Asylum; and Sir Henry Holland, Bart. All these physicians concurred in pronouncing Mr. Parish to have been, from organic disease of the brain, incapable of making a will. The opposite side was sustained by Professor Alonzo Clark, of New York, "whose objections, however, were fully answered by Dr. Watson."

II.—*English Psychological Literature.*

11. *A Case of Moral Insanity or Dipsomania.*

(From 'Clinical Medicine: Observations recorded at the Bedside, with Commentaries,' by W. T. GAIRDNER, M.D. Edin., Regius Professor of Medicine in the University of Glasgow.)

From this acceptable contribution to medical literature, the faithful record of good work, communicated in a style as lucid as the matter is replete with careful observation and philosophic reflection, we shall venture to pillage a long extract, which will prove that the specialist also may refer to it with satisfaction and profit:—

The other case of delayed cure is also connected with drink, but although the man was very excited on admission, indeed quite frantic from drink, I doubt if it can probably be called delirium tremens. Since he has sobered down it has presented none of the characters of this disease; but, on the other hand, it is very evidently a case of what is now often called *dipsomania*.

Remark the particulars; for the case is a type of many others. This man came in mad with whiskey, and yet clamouring for whiskey; absolutely maniacal in fact; but I suppose merely from the immediate effects of drink. By and by he sobered down, and being told most absolutely he was to have no whiskey at all, he reconciled himself to what he thought was simply a necessity of the case. In the course of conversation with him about this matter, I thought I detected him in various palpable untruths; and, indeed, it very soon became apparent to me that he was one of those unfortunate persons who hardly know whether they are uttering truth or falsehood when they make a strong assertion. There was a shamelessness and regardlessness of consequences, and even of decency, about his whole manner, that convinced me I had to deal with a very low type, indeed, of human nature in this case. He had not the slightest sense of regret or of remorse, but would always take me into his confidence, and explain to me how much he needed

some more whiskey. The result of this unsought confidence was, that I learned his antecedents so far,—he had been drinking until the money was done, and till he was quite out at elbows; and then he went and drank at the expense of anybody and everybody who would give him whiskey, until he landed himself in the infirmary. He had not been in the ward two days, moreover, before he developed a new phase of degradation, for the attendant caught him masturbating. He did not deny the fact to me, but said it was only once, that he had never done it before, &c. All this, however, he said with the most perfect indifference as to whether I believed it or not, and I could not but tell him very plainly that I did not believe a word of it. This he received with the same cool indifference as the former charge of habitual masturbation. He is thin, withered-looking, without colour, yet without apparent bodily disease or deformity. There is in all this, evidence of long-continued and probably irreclaimable bad habits, founded on a weakening of the moral sense amounting to a kind of *paralysis* of it. You cannot get hold of anything on which to act in the way of making this man ashamed of himself. His aunt, whom I sent for, and who speaks of him on the whole with wonderful charity and good temper, as well as good sense, says, without reserve, that it was always so. He has *never* been able to do anything for himself, or to turn his mind to good in any shape. He *never* would work, and drank at all times when he could get the drink. In fact, she says he was always a perfect “gowk” (*i. e.* a fool, a simpleton, Jamieson’s ‘Dictionary’), that is the climax of her description; and I hold that it is both a charitable and a true description, the more so that it is perfectly simple and natural, having no relation to any ulterior object whatever, for she has plainly none in view.

Our patient has had sense enough for the most part, she says, to keep out of the way of the police, and that is about the utmost that can be said for him; but even that cuts two ways, for possibly if he had been more clever and ingenious, he might have been led more easily into positive crime. As it is, we have pretty clear proof that he is:—1. An utterly abandoned, and almost unconscious liar. 2. An almost equally shameless masturbator. 3. A drunkard, quite devoid of self-control, or even of the desire to control himself. 4. A *lazy* and an *incapable*, of the most incorrigible description. 5. “A perfect gowk,” or to use another most expressive Scotch phrase—a *ne’er-do-weel*,* *i. e.* one who not only *does* not do well, but apparently *cannot* do well; who has neither the capacity nor the desire to do well. It is a case not only of degradation, but of positive *degeneration* of the moral instincts; and the degradation is

* “Ne’er-do-weel, one whose conduct is so bad as to give reason to think that he will *never* do well.” (As an adjective.) “Past mending.” Jamieson’s ‘Dictionary.’

probably both physical and moral by this time; the machinery of mind has suffered as well as the mind itself. This man, I believe, literally *cannot* do good at present; you can no more expect good conduct and high principle from such an organization than you can from a gorilla. A long course of reformatory discipline might possibly, indeed, even now, do something to reverse the habits of forty years; but at this moment of time the man is in a state of *moral paralysis*, powerless for good, and a prey to evil, in virtue of his physical and moral organization, his craving appetites and deeply imprinted bad habits. There may have been also a congenital fault or deficiency; but about this we know, and can know, nothing with any certainty.

What can you do with such cases? you often meet with them in various degrees of urgency in the highest ranks, and then they are especially puzzling. Positions of very high responsibility have sometimes to be filled after a fashion, and in the eye of the world, by such persons. For example, it is quite easy to suppose that the peerage might devolve its honours upon the head of such a being as this, or a princely fortune might fall to be spent by him without control; which would be truly, and in the largest sense of the word, a *misfortune*, inasmuch as it would merely give free scope to all his base, revolting, and ruinous propensities. Then rises the question of moral responsibility in the eye of the law, or of technical *insanity*—a difficult one to settle, I need not tell you, from the legal point of view, especially when money is plentiful. Such men are not *cretins* or idiots, and yet there is something in them plainly deficient, as compared with a sound organization. There is a certain loss of self-control, which is not a mere vice but has become stereotyped, as it were, and stamped down upon the habit as an infirmity extending over the whole moral organization. But does it constitute insanity? The legal view of the case is extremely involved, and we have no occasion to discuss it at present, but as a practical question of medical treatment, I would put it thus: What can you make of him? Is there anything you can act upon through the ordinary forces of moral discipline, and with reasonable hope of a good result within a reasonable time? Is there any *moral leverage*, so to speak, by which you can move the sluggishness, the low tone of this man's whole moral nature? If so, use it by all means; but if not, or if you fail utterly after trial, accept the alternative. I consider this a really *diseased mind*, in a practical sense, as regards the medical and moral question of cure. It is a mind plainly requiring to be under control and coercion; you can make nothing of it otherwise. As to the technical question of insanity, as affecting legal rights and responsibilities, I would not allow it to be too much mixed up with the other, but leave it to be practically settled also according to the nature of the interests involved. I don't care

in the least about the *word* insanity ; and I confess I think it quite unnecessary to look too closely into the metaphysics of the matter. It is to me a practical question altogether ; in one case a question of medical treatment ; in another of law and of substantial justice (though sometimes rather rough and ready justice) to the individual and to society.

In this man's case, I should be disposed to recommend as a matter of treatment, his being put under a certain amount of personal restraint, with due moral and medical discipline, and this probably for a long time. I entirely believe that this man cannot possibly be made a useful member of society, or even otherwise than a nuisance, without such discipline. But I feel the want in these cases of proper support from public opinion, and from the law. I *dare* not certify even this wretched being as insane, without more obvious and striking reasons to carry conviction to every one's mind, as well as my own, than I have at present ; so he must be left to cumber the ground. If I could even force him into the workhouse, it would be a point gained ; but I cannot *force* him at all ; we must simply let him go his way. Better men than he have committed murder or suicide in the like circumstances, but I don't see clearly anything of this kind impending in this case ; I think he is too great a coward, and too utterly inert, to set about doing either the one or the other ; and therein, perhaps, lies his immediate safety. But the existing state of the law, and of public opinion, is very unsatisfactory in regard to these cases. As *prevention* is better than cure, I think that society, and the medical man as the organ of society, ought to have a much greater control than exists at present over such cases.

The Antagonism of Law and Medicine in Insanity, and its consequences. An introductory lecture. By THOMAS LAYCOCK, M.D., Professor of the Practice of Medicine and of Clinical Medicine, and Lecturer on Medical Psychology and Mental Diseases, in the University of Edinburgh.

(' Edinburgh Medical Journal,' July, 1862.)

This introductory lecture to his course of medical psychology by Professor Laycock is worthy of record in these pages as containing an unanswerable argument for the addition to our medical curriculum of clinical teaching of mental disease. It is indeed mournful to think how this subject is neglected in England. A very few lectures at St. Luke's form the whole that is done herein, and these lectures are far from giving either a regular or systematic course of instruction.

" If any arguments were needed," says Dr. Laycock in the introduction to this lecture, " that such a course should form part of the

medical curriculum, and be delivered in every medical school of the United Kingdom, recent proceedings in the English Courts of Law and in the House of Lords would amply supply them. From those proceedings we learn how distinct and complete is the antagonism between law and medicine, as to the principles of mental science and its applications to mental diseases and defects. Medicine declares that insanity is a physical or corporeal disease; law declares that it is not. Medicine says that insanity and imbecility are different conditions; law, that they are analogous. Medicine maintains that a theoretical and practical study of mental diseases and defects is necessary to the proper understanding and detection of mental disease or defect; law denies this, and says it is a fact to be determined by any dozen of ordinary men in consultation on the case. Medicine says a man may be insane and irresponsible, and yet know right and wrong; law says a knowledge of right and wrong is the test of both soundness of mind and responsibility to the law. Medicine says, restrain and cure the insane and imbecile offender against the law; law says, hang, imprison, whip, hunger him, and treats medical art with contempt. Thus law, as recently expounded in the English Courts and the English Legislature, is entirely antagonistic to medicine on all those questions of mental science which involve the freedom and well-being of the imbecile and insane, and which often determine whether they shall die an ignominious death or not. This antagonism is a very serious matter therefore to the insane, their friends, and families; more serious to the judges and legislators of our country; and not without deep interest to the medical profession. For with such direct antagonism to medical doctrines and practice on the side of law, the existing prejudices in the mind of the public, and which have been exhibited in very high quarters, will be more deeply rooted; so that we shall have greater difficulties to encounter in treating the insane, in bearing witness to their infirmities in courts of law, and in enlightening the public on a subject which most deeply concerns it."

Professor Laycock enforces his argument for the necessity of instruction in our schools of medicine on the question of insanity by a reference to the debates in the House of Lords in the Chancellor's Lunacy Bill of this year (happily amended in the Commons), and by the trial of George Clark* at Newcastle-on-Tyne on the 27th of February, 1862. This latter case is so instructive that we quote Dr. Laycock's summary of it; with his remarks in full:—

"A man named George Clark, a cabinetmaker, killed a tax-collector in Newcastle on October 1, 1861, by stabbing him with a sharp-pointed knife. In the month of May preceding the collector had dis-

* The evidence bearing on the mental state of Clark, and the charge of the judge, are given at length and ably commented on in the '*Medical Critic and Psychological Journal*,' for April last.

trained upon Clark's tools for the non-payment of his dog-tax ; and this was the alleged motive, as it was clearly the exciting cause, of the murder. He was tried on 27th February last, and defended himself. The history of his conduct previously and subsequently to the murder, and his conduct during the trial, abundantly proved that he was an aggressive melancholiac ; labouring under notional insanity both at the time he committed the act, and when tried for it. The judge laid down the law of the case to the twelve "ordinary men" who constituted the jury, and who, in accordance with his charge, brought in a verdict of guilty ; and then the judge solemnly pronounced the sentence of death. He told the helpless lunatic at the bar he had no doubt, and the jury had no doubt, not only that when he committed the murder he was responsible for his actions, but also that he understood perfectly the whole of what he was doing in depriving himself of counsel and defending himself ; otherwise he (the judge) would have postponed the trial or postponed the sentence. Then the judge solemnly exhorted the madman to repentance and prayer, and finally petitioned the Lord to have mercy on his soul.*

Such was the deliberate, solemn procedure in an English court of justice in the year 1862, in the case of a maniac who, being let loose in society by the law, became in due course amenable to the law. I do not say that murderous maniacs should not be hung ; much might be said as to the expediency of that ; but certain inhabitants of Newcastle, in common with all who value justice rather than expediency, were shocked with that sad outrage on justice perpetrated in the name of the law, and at once took vigorous and happily successful steps to prevent the hanging,—the humane judge helping them. The judge was not to blame in this case, remember, but the law. This he laid down clearly and plainly, and I may say with admirable although inexorable justice, as between the maniac murderer and society. The legal dicta being what they are, no other course was judicially open to him. Clark knew what he was about, and therefore he was responsible for his actions ; however mad he might be, if he knew this he must suffer the penalty ; that is the law. "In a well-known case," he said, "the House of Lords put questions to the judges, and the judges answered them in this way." If a man had a delusion and killed another in consequence of it, if that delusion would not in law justify a sane man in seeking vengeance, neither in law would it justify an insane man. And the judge added the theory of the law. "In point of fact," he remarked, "the law does so because it acts upon people's fears, and it endeavours to protect persons from the murderous attacks of others by acting upon the terrors of those who may feel disposed to do such attacks ; and if

* The surgeon of the prison who had watched Clark for five months said he was insane ; and the Medical Inspector of Prisons, sent by Sir George Grey, concurred.

a person has a particular delusion, but still has the power of knowing what he is doing, and that what he is doing is wrong, the law will make such a person responsible." And so Clark was condemned to be hung.

Now, there is perhaps no more instructive example on record of the mischievous influence of an ill-considered speculation than the opinion of the law Lords, to which the judge in this case referred the jury, and which guided his own course in the solemn administration of justice. It has more than the force of an Act of Parliament, but yet is a mere dictum of a number of gentlemen learned in the law; most learned in that—nevertheless, with no professional knowledge of that which they had to decide upon—namely, the nature of imbecility and mental incapacity, and the bearing of mental disease upon even their own theory of legal punishments. This dictum was duly explained by a learned judge to twelve ordinary men, all equally ignorant of the subject as the twelve judges. A maniac plead before them for his life, and yet he was held to be both morally responsible and capable of conducting his defence: the plainest facts of the case failed to bring out the common sense of the judge or the jury, weighed down by the legal *dictum*; and a maniac was not only found guilty, but solemnly sentenced to death. The judge wisely said "it would be folly—almost blasphemy—to punish a man for an offence to which he has been instigated not by his own guilty will, but by an infliction sent upon him by Providence itself," and solemnly sentenced the man to be killed. But be it noted, on the next morning he wrote to Sir George Grey to express his doubts as to the man's sanity. A certificate of insanity was then duly signed by two competent physicians, and the catastrophe of a judicial—almost blasphemous—murder was obviated. But the Nemesis of legal error still pursued the Government, for the magistrates of Newcastle, already enlightened by the Lord Chancellor's expositions, refused to concur with the physicians, and declared that the grounds for the medical opinion were insufficient to constitute mental unsoundness. The man had been fairly tried, and duly and solemnly condemned, and they concurred with the "ordinary men" of the jury; so that it only remained for Sir George Grey to get the wretched man out of their custody by commuting his sentence to PENAL SERVITUDE FOR LIFE."*

This case is certainly a singular illustration of the distinction between law and justice.

Professor Laycock may well conclude his lecture with the remark, that from whatever point of view we look at the present position of mental science and of its practical applications to mental diseases, and to the administration of justice, it must be confessed that it is

* The prosecution, suspecting that Clark was feigning madness, sent Dr. Macintosh to examine him, who reported that he was insane.

intolerable, and a disgrace to us as a nation. It is no longer to be endured that the courts of law and schools of medicine should be at issue as to the fundamental question, whether insanity be a disease or not, and as to all its important practical applications. It is quite certain that there can be no withdrawal therefrom on the side of the profession, for to that principle and its applications must be attributed the rescue of the insane from the state of degradation and the cruel usage of which they were the victims at the close of the last century; on the contrary, it will be more and more developed, for to recede would be to reverse medical progress, and stop all the large advance in mental science made of late years.

16.—*Plural Births in Connection with Idiocy.* By ARTHUR MITCHELL, A.M., M.D., Deputy Commissioner in Lunacy for Scotland, Corresponding Fellow of the Edinburgh Obstetrical Society, &c.

(‘Medical Times and Gazette,’ Nov. 15, 1862.)

During the last four years Dr. Mitchell had officially to examine and report on a large proportion of all the idiots in Scotland. In the course of his inquiries into the history of each case, from time to time, it was stated, that the patient was one of twins. This, indeed, occurred so frequently, that he was at length led to suspect that there might be some connection between plural births and congenital defects of mind. He therefore resolved to investigate the subject, and to determine how frequently, in a known number of idiots, a twin would appear.

As the result of this numerical inquiry, in 443 cases, Dr. Mitchell states that—

“11 times the idiot was one of twins.

“4 times one or other parents of the idiot was twin or triplet-born.

“32 of the 443 mothers had borne twins, once, twice, or more frequently.

“43 of the 443 families presented twins, more or less frequently. borne by mother, grandmother, aunt, or sister of the idiot.

“I hardly think,” he adds, “that any one will peruse these facts without feeling that some connection between plural births and idiocy, if not proved, has, at least, been rendered highly probable.

“When compared with single births, the whole history of plural births is exceptional; they are more fatal to the mother; they represent a larger proportion of dead-born children; the mortality of the offspring in infant life is greater; premature deliveries are more numerous; abnormal presentations and the necessity for instrumental assistance occur more frequently; the children are smaller, and

are apt to be unequally developed. All these points of difference are far from indicating vigour; on the contrary, they lead us to anticipate, in twin children, feebleness of constitution and imperfect development."

Dr. Mitchell illustrates this view in a series of propositions, worked out in the style of Professor Simpson's numerical demonstrations in his obstetric papers:

I. Parturition is more fatal to the mother in plural than in single births.

II. Plural births are more frequently premature than others.

III. Abnormal presentations, and the necessity for instrumental assistance, occur more frequently in twin than single births.

IV. Of twin children, a larger proportion is dead-born than of single.

V. But not only is the death-rate among twins abnormally high before the children are finally separated from their mothers, it also happens that the same excessive mortality is observed during the first week or ten days of extra-uterine life, and there is every reason for believing that it continues for several years.

VI. Twin children, as a rule, are abnormally small at birth.

VII. In the case of the cow, the female co-twin with a male is very generally barren.*

VIII. When both children live, and have to be nursed by one woman, there is a risk of injury from underfeeding. I do not think that this proposition demands any comment.

"The foregoing facts in their aggregate prove," says Dr. Mitchell, "that, when woman ceases to be uniparous, it is to the disadvantage of herself and of her offspring, and especially to the disadvantage of the latter. It is the departure from a design of nature, not seemingly under control, and having a cause which we do not know; but, being a departure, misfortune is the result. Everything in the history of twin children indicates low viability, feeble organisation, and imperfect development; and this, apart from the risk of injury to which they appear to be peculiarly exposed in the act of birth, would lead us to expect among them the frequent occurrence of nervous disorders. In whatever class the condition, during intra-uterine existence or at birth, is unfavorable to life—in that class we are certain to find a prevalence of cerebral disease, accompanied often by physical defects or frailty. That twin children are in this unfavorable condition I think has been established. Woman was clearly intended to bear only one child at a time, and the wider the departure from this intention the more marked is the consequent

* Professor Simpson has shown that this does not hold good in the human family, though it was long believed to do so. Nevertheless, in the fact, that it is true of any uniparous animal, we see the indication of a tendency to incomplete development in cases of twinning.

calamity. If we turn from twins to triplets and quadruplets, we find the proof of this statement. Among them premature births are still more frequent, and the number of dead-born children still greater, and of those who are born alive only a few reach maturity. I know personally only one triplet case, in which all three reached adult life. They are three men born half a century ago, and, curiously, they are all at present living under one roof. One is lame, one has double rupture, and all three are eccentric. In one this eccentricity of late years has been intensified, and is now spoken of as *insanity*. He alone is married, and one of his children is a complete idiot. I know another case in which two of triplets reached maturity. They are both women, and are both married. One is barren, and the other bore two children with spina bifida, and a third anencephalous. The mother was a tall, handsome, and intelligent woman, and bore several other children, well-formed, and apparently quite sound both in mind and body.

“Plural births have been thought to indicate an excess of reproductive force; and in one sense, perhaps, they may be so regarded. But this is certain, that in families where they occur with frequency they are often associated with illustrations of a manifest deficiency in the reproductive powers. In many instances I have observed this close alliance between what is held to indicate excess, and what is held to indicate deficiency of reproductive energy. Twinning in the human species, I think, must, at least, be looked on as a misdirection or error in reproduction, and it is doubtful whether in any case it is correctly spoken of as indicating high reproducing qualities. If a woman bears twins or triplets, and if among her single-born children, hare-lip, club-foot, dwarfage, microcephalism, and abortions occur, I scarcely think we can say of that woman, because she bore twins, that the faculty of reproduction in her is strong. It is both strong and weak, apparently excessive at one time, and defective at another; or rather, perhaps, according to the view which I am inclined to take, weak at all times, since an error in any process is practically weakness, whether it lead to overdoing or underdoing in the results; and still more positively is that process weak which is influenced by a peculiarity tending to overdo now, and to underdo then. The proof of strength and perfection in any process is a good result, steadily produced. The proof of weakness is a bad result, and uncertainty in the character of the badness augments the weakness. True, it may be said, the process in the one case is called weak from attempting too much, and in the other from not attempting enough—in neither case accomplishing the work well: the one, however, being a weakness from excess, and the other from defect, with an essential difference, therefore, in their nature.

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“Everything, in short, points to a remarkable connection between

twin births and defective organisation. If this be recognised as true, then twin children ought to be treated with peculiar care after birth, and for the first few years of life. The defect may, in many cases, merely consist in a negation of power—a lessened viability—rendering them unable to resist pernicious influences, which would scarcely affect children more favorably conditioned at birth. Care in the nursing and general management of such cases is clearly desirable, in order to secure, as far as possible, the completion of that development, which may be regarded as probably imperfect at birth. All other aspects of the condition of twin children indicate the same necessity for unusual care.”

The fact that persons of very great intellectual and physical vigour are every now and then found to be twin-born, in no way interferes with the soundness of the *general conclusion* to which this research points, and the basis of which may be briefly stated as follows:

1. Among imbeciles and idiots a much larger proportion is actually found to be twin-born than among the general community.
2. Among the relatives of imbeciles and idiots twinning is also found to be very frequent.
3. In families where twinning is frequent, bodily deformities (of defect and of excess) likewise occur with frequency.
4. The whole history of twin births is exceptional, indicates imperfect development and feeble organisation in the product, and leads us to regard twinning in the human species as a departure from the physiological rule, and, therefore, injurious to all concerned.
5. When we pass from twins to triplets and quadruplets, everything we know regarding these latter gives support to the general conclusion in question.

17. *The Medical Critic and Psychological Journal*. Edited by FORBES WINSLOW, M.D., D.C.L., No. viii, October, 1862.

The current number of this journal contains the first part of a most philosophical paper, ‘*On the Nature of Volition, Psychologically and Physiologically considered*,’ by J. Lockhart Clark, F.R.S.

It is too carefully reasoned to admit of any abstract of its contents.

There is also an interesting paper on ‘*English Suicide-fields*,’ by J. N. Radcliffe, Esq., the Honorary Secretary of the Epidemiological Society; apparently a summary of the paper which attracted so much notice at the late Social Science* Congress in London.

* ‘The Social Science Review’ for September has also three articles by Mr. Radcliffe on this subject of suicide.

The average of suicides in England and Wales, to the population, is 6·7 suicides to 100,000 population. Mr. Radcliffe gives the following table, showing the counties and districts of inordinate tendency to suicide :

		Proportion of suicides to 100,000 Population.			
<i>The London Suicide-Field.</i>	{	Middlesex .	.	.	10·5
		Kent .	.	.	9·7
		Surrey .	.	.	9·5
		Sussex .	.	.	8·9
		Hants .	.	.	6·9
<i>The Midland Suicide-Field.</i>	{	Leicester .	.	.	8·9
		Lincoln .	.	.	8·7
		Nottingham .	.	.	8·7
		Warwick .	.	.	8·0
		Derby .	.	.	7·77
<i>The Northern Suicide-Field.</i>	{	Westmoreland .	.	.	9·9
		Cumberland .	.	.	8·6
		Lancaster .	.	.	7·0
		Chester .	.	.	7·0

18. *Homicidal Mania : a Biography ; with Physiological and Medico-legal comments.* By D. YELLOWLEES, M.D., Assistant-Physician, Royal Edinburgh Asylum, Morningside.

(Read before the *Medico-Chirurgical Society of Edinburgh*, 4th June, 1862 ; and reprinted from the '*Edinburgh Medical Journal*' for August, 1862.)

William Smith was for more than twenty years the most remarkable and most dangerous inmate of the Royal Edinburgh Asylum : the story of his life is worth telling for its own sake ; but yet more so for its physiological interest, and for its bearings on some very important and much debated questions in legal medicine. Dr. Yellowlees has told this history with much skill. We must refer to his paper in the '*Edinburgh Medical Journal*' for the narrative. We quote Dr. Yellowlees' summary of the case :—

"It is scarcely possible to find language strong enough to describe the bloodthirsty passion which possessed the man, the devilish ingenuity, deliberateness, and determination with which all his attacks were made, or the fiendish delight with which he gloried in relating them, and revelled in the thought of a merciless and bloody success.

"In 1855, his health began to give way, but he still indulged in

fierce threatenings far beyond his power of execution. In this year restraint was finally discontinued, and he was taken regularly under special charge of an attendant to the chapel and the weekly ball—privileges which he highly valued. He spent his time chiefly in writing songs, anthems, and choruses, which were the names he gave to miserable attempts at music with original words attached.

“In 1858, I first made Willie’s acquaintance, and a visit to his room then was a thing to be remembered. You might have noticed, ere leaving, the strength of the door, the absence of all furniture except a fixed bed, the height of the window which Willie insisted on having open even in the depth of winter, and the many writings and drawings on the wall, but your attention would certainly have fixed itself first on Willie himself. He was always to be found sitting up in bed, with his inkbottle beside him and his manuscripts on his knee.

“In the end of 1858, he had a slight apoplectic attack, but its effects were very transient and did not alter his mental condition.

“In 1859, he was as poetical, loyal, and homicidal as ever. He frequently appointed days for murdering certain people, and had always some ingenious reason for his non-fulfilment of the threat. When he failed to find a good excuse, he said it was in order to show that he was a merciful man, and not the bloodthirsty villain they took him for. In further support of this, he used to quote occasions when he might have brained or strangled an attendant and yet refrained, not recognising that this very argument was a confession of how constantly the thought of murder was uppermost in his mind.

“About this time Willie was offered the privilege of a visit to Edinburgh. For almost twenty years he had never been beyond the grounds of the asylum, and had spent most of the time in his solitary room. He was, from old age and increasing dementia, by no means the formidable man he once had been; and it seemed that this indulgence might with proper precautions be safely granted, and might add a little happiness to his lonely life. He was much elated at the prospect and very grateful. He selected the night-watch as the person who should accompany him, and at the time appointed he was ready, dressed in the best suit the attendants could procure. He went to the door full of eager anticipation; but as soon as he saw the carriage waiting for him, and understood that he was not to walk through the town as he had intended, he turned and went straight back to his room, threw aside the new suit, and absolutely refused to go.

“He had evidently intended mischief, and was so mortified at his purpose being thus thwarted under the guise of special kindness, that no persuasion could induce him to change his resolution.”

PART IV.--MEDICO-LEGAL CASES.

Hall v. Semple.

THE trial of *Hall v. Semple*, which occupied the Queen's Bench during four entire days of last month, may have received, before these remarks appear, a still further development in a Court of Error; the case is one of great public interest, and although, as being still undecided, we cannot write so freely upon it as we might otherwise do, there are many points bearing upon the law of lunacy, and its practical working, which it involves, and which it has presented in an aspect entirely at variance with our own views and experience.

The main facts of the case may be shortly stated. Mr. and Mrs. Hall, dealers in china, in the Tottenham Court Road, have led for thirty years a married life of perpetual disagreement. Mrs. Hall states on oath that she believed her husband to be mad soon after their marriage, and thinks him so still; a certain Mr. Lintot and Mr. Guy appear to have held a similar opinion, and the latter, years ago, gave a certificate to that effect, which was then not acted upon. In July last Mrs. Hall called upon Dr. Semple, the defendant, with whom she had no previous personal acquaintance, and requested him to examine her husband, with a view to determine the state of his mind; this Dr. Semple did on the same day, but feeling that in a short interview he was hardly able to arrive at any definite conclusion, and evidently unwilling to take the unsupported statements of Mrs. Hall, he proceeded to make inquiries of Mr. Guy, to whom he was referred, and of others in his own household and in the neighbourhood. As the result of these inquiries, and such observations as he had made, Dr. Semple wrote a certificate. Omitting the preamble, which was correctly written, the following were the reasons upon which he came to the conclusion that Mr. Hall was a person of unsound mind:

"1. Facts indicating insanity observed by myself:

"He had a wild and staring look, with restless eyes, and nervous, agitated manner. He represented to me that his wife was ruining himself and business, and he intimated that she was improperly associating with other men; he is evidently labouring under delusions, and he acts upon those delusions.

"2. Other facts (if any) indicating insanity communicated to me by others:

"He is guilty of repeated acts of violence; he constantly threatens his wife, and often assaults her; he sleeps with a drawn sword by his bedside, and declares he will murder any one who approaches him, and he has often threatened to stab his wife.

"ROBERT H. SEMPLE,

"8, Torrington Square, London.

"Dated this 29th day of July, 1862."

Upon this certificate, and another from the before-mentioned Mr. Guy, and on the authority of an order from the wife, Mr. Hall was carried off to Mr. Elliot's asylum, Munster House, Fulham. On his release, two days after, he brought an action against Dr. Semple, the declaration containing the following three counts :—The first was under the common form of trespass for false imprisonment; secondly, that the defendant had wilfully and maliciously signed a certificate under the statute; thirdly, that he had maliciously induced Mr. Guy to do the same. The jury found for the defendant upon the first and third counts, but upon the second, while they entirely acquitted the defendant of malice, they gave it as their verdict that he had signed the certificate without due and proper inquiry, and had acted *negligently in not ascertaining the sanity* of the plaintiff, which they affirmed. They assessed the damages at £150. The costs on both sides, of course, fell upon Dr. Semple, and these together amount to nearly £600.

The learned judge, Mr. Justice Crompton, who tried the case, although in the early part of the trial he had expressed an opinion that the question for the jury was simply whether Dr. Semple had acted with *bona fides* in signing the certificate, in his summing up, which was most elaborate and careful, directed them that an action would lie supposing that negligence alone had been in their opinion proved. To this ruling Sergeant Pigott, the counsel for the defendant, tendered a bill of exceptions, contending that the defendant, if acting in good faith, was protected by the statute of lunacy; and that if the second count were amended by the substitution of *negligently* for *maliciously*, the jury should be instructed as to what omission on the part of the defendant constituted culpable negligence. These exceptions were admitted, and it remains to be seen whether they can be successfully argued upon a writ of error.

Assuming that Mr. Hall were sane, it is satisfactory to find that the wrong done him was not malicious, and was soon redressed; at the same time we cannot consider it a light thing that a sane man should be confined even for a moment in a lunatic asylum. It is hardly two years ago since Lord Shaftesbury told the Committee of the House of Commons that he had never known an instance of the kind; the indignation excited in the public mind by this case was therefore not unnatural, and it was heightened by several circumstances that appeared in evidence, which, though really not affecting the issue, had probably great influence upon the decision of the jury, and certainly much increased the public exasperation. In the first place, the plaintiff himself appeared in court, and gave his evidence clearly and well; secondly, it was shown that Dr. Semple, the defendant, had written some letters after the admission of Mr. Hall into the asylum, which, to say the least, were most uncalled for and unwise; then, the plaintiff had been carried off from his own door

by main force, in a cab, by two men, whose conduct very plainly evinced their entire unfitness for the office of attendants upon the insane. Lastly, the plaintiff, upon his arrival at the asylum, was turned into a corridor with a number of insane patients, and left unvisited till the next evening; he was also—and the fact seemed to very much impress the jury—intrusted the next morning with a razor, although stated in the order for his admission to be a “dangerous lunatic.”

One other mistaken impression tended to fan the public indignation. Mr. Hall was discharged from the asylum upon the second day of his arrest by two of the Commissioners of Lunacy. It was popularly assumed that he was so discharged because the Commissioners thought him not to be of unsound mind; it is, however, not the least important incident in this singular case that he (Mr. Hall) was really discharged, not because he was sane, but because his certificates were informal; the Commissioners gave no opinion as to his sanity. The proprietor of the asylum—not, let it be observed, a medical man—although in his evidence he stated that he thought Mr. Hall of sound mind, had, in fact, detained him upon a certificate of Dr. Semple, which is very weak, and in point of law is informal, and upon the certificate of Mr. Guy, which, as he must have known, was absolutely invalid. While the public journals, in leader after leader, are dilating upon this painful case, heightening to intensity the popular dread of lunatic asylums, and clamouring for new lunacy laws, with penal clauses still more severe, it is well to call attention to the fact that in this case, redress followed rapidly upon the wrong, the interposition of the Lunacy Commissioners was speedy and effective, and that the law of lunacy could not be said to have failed in its object of affording protection against improper arrest, because in this instance it was simply set at naught, under circumstances which will, doubtless, receive the attention of their Board. We may say here that, although the Commissioners were attacked by the plaintiff's counsel, their conduct throughout received the commendation of the court, and the public must feel that they exercised a wise discretion in refraining from an expression of opinion, which must have had the effect of prejudging a case which was certain to appear subsequently either before their own or some other tribunal.

It is with no spirit of bitterness or sarcasm that we would mark this painful case as one which illustrates the danger the public must incur, if the administration of the Lunacy Law is left solely to medical men, who, however well meaning, are without sufficient experience to decide a doubtful case, and are, through ignorance of technical forms, liable to involve themselves and others in serious legal difficulties. It is but a few months ago that physicians engaged specially in the study of insanity were exclaimed against as theorists, their evidence was to be excluded from courts of justice,

it was recommended that their asylums should be handed over to intelligent laymen, and it was gravely asserted that men of common sense and knowledge of the world were equally competent with them to decide as to the existence or non-existence of insanity.

With certainly no amicable feeling towards 'mad doctors,' an amendment of the Lunacy Act passes through the legislature, and, by a sort of poetical justice, the first trial that occurs after this becomes law presents us with the spectacle of an apparently sane man who, upon the informal certificates of two gentlemen who are not 'mad doctors,' is dragged off in the most barbarous manner to an asylum, whose proprietor, again, is not a 'mad doctor,' but who nevertheless keeps the patient, whose sanity he says he recognised, till his discharge by the Commissioners in Lunacy on account of the hopeless invalidity of his certificate. In all these proceedings, from first to last, no 'mad doctor' appears upon the scene, and we are surely justified in expressing an opinion that, if the advice of a physician experienced in cases of insanity and accustomed to weigh evidence, had been sought, a grievous wrong might have been avoided and a great public scandal prevented. But this does not seem the view of the public, who, although the lunacy law was in this case broken, and cannot, therefore, be said to have failed—although the Commissioners in Lunacy promptly redressed the wrong that had been committed, for which no 'mad doctor' was responsible—renew their clamour against our profession, and ask angrily for new laws and for vindictive punishments.

Although it must remain impossible that under any system that can be devised all wrong or error shall be prevented, the case of Mr. Hall was one well calculated to raise to an extreme degree the alarm of the public. The imprisonment of a sane man, even for an hour—the assault upon a citizen at his own door, and his being carried off late at night, suddenly and illegally, to an asylum, might warrant still greater indignation than has been expressed. It was tersely said that the fact of no malice being proved made the matter worse, as it is far easier to guard against knavery than against ignorance and folly. The result of the case, however, goes to prove that prompt redress must follow errors such as those committed in the course of this extraordinary case; we should, however, think the verdict of the jury more satisfactory if Dr. Semple had not been, as it were, made the scapegoat in the matter, while the principle involved in the question is left uncertain. We have no desire to defend Dr. Semple; honorable and conscientious though he is deservedly considered, there can be no doubt that in this case he was first careless, and afterwards too zealous; his letters to the asylum were indefensible, inasmuch as, if Mr. Hall were a dangerous lunatic, he must have been so for the last twenty years past, and there had been no recent symptoms to warrant Dr. Semple's opinion, even if he had not ext

ceeded his duty in giving it. Moreover, in the defence of the action he seemed to allow judgment to go by default; and as he did not attempt to justify his views, he must therefore be taken to have written a certificate which was untrue or erroneous, or else of having expressed opinions founded upon facts which were insufficient or on theories not susceptible of either explanation or defence. The argument set up by Dr. Semple's counsel, and most ably and successfully pleaded, went to this:—the defendant had acted in good faith, and there was no such culpable negligence shown as could justify damages; and even if there were, he was protected by the statute. We believe that upon the last point Dr. Semple will ultimately succeed, and that the verdict will not stand. In this we must not be misunderstood; we do not say that sane men are to be assaulted and carried off to lunatic asylums, and that the pleas of a good intention and *bona fides* should bar their right to damages; we do not say that any of those directly or indirectly concerned in such a supposed transaction ought to escape punishment; but we do maintain *that it is contrary to the statute in lunacy*, and that it will prove highly detrimental to the best interests of the public, if medical men, proved to have given a certificate in lunacy in good faith, and under an Act which they consider to authorise their proceedings, should be held liable to an action in the form of that taken by the plaintiff in the case of *Hall v. Semple*. The result must be that in many cases of lunacy no certificate will ever be obtained; it will not be easy to find a physician willing to take the risk of heavy damages being given against him, upon the opinion of a jury being contrary to his own. Again, the medical man called into a case of alleged lunacy will find himself in this dilemma: should he certify to the patient's insanity, if he is mistaken he is exposed to the danger of an action from the patient; on the other hand, should he not certify, and disastrous consequences follow, he is clearly liable to a charge of negligence, which the public will itself punish, even if it does not meet the tender mercies of a jury.

The question really of interest is—supposing a patient consigned in error to an asylum, and detained there, either culpably or otherwise, does an action lie against the physician or physicians who, in good faith, signed the certificates; and if so, what form should that action take? To understand the exact bearing of this question, we must recal to remembrance the exact wording of the present certificates in lunacy.

Formerly the physician signing certificates declared it as his opinion that the alleged lunatic was a proper person to be confined, but the physician, according to the recent forms, expresses only an opinion that the patient is of unsound mind, and fit to be detained under care and treatment; this certificate is in the same terms whether the patient be sent to an asylum or to a lodging, or kept under

restraint in a private house; the physician signing need not know which of these three is the result of his signature, and frequently certificates of this description are given, with the addition that the case is not one for which an asylum is necessary. Under these circumstances, then, it is absurd to hold the physician responsible for an assault upon the patient or for his being carried off to an asylum. With this he has nothing to do; his function begins and ends with the expression of his medical opinion. Before any proceedings can be taken upon this opinion, that of another independent medical man must be obtained, and accompanied by an order from some relative, which specifies the place to which the patient is to be sent. These documents being complete, the proprietor of the asylum or private house who receives the patient can produce them in bar of any proceedings against him for the reception of the patient. But the legal forms by no means end here; the certificates must be copied and transmitted within twenty-four hours to the Commissioners in Lunacy, who jealously scrutinise their wording, and make searching inquiry in case of any irregularity in their form; then, at the end of two days, the proprietor of the asylum makes a statement as to the mental condition of the patient, and from that moment assumes the responsibility of his detention.

In the case of *Hall v. Semple* an infraction of the law took place. Mr. Hall was seized without proper authority, was received into the asylum without proper authority, and detained there without any authority at all; for this the proprietor of the asylum must answer. It is clear, and the jury specially so decided, that Dr. Semple had nothing to do with these proceedings, and therefore, we submit, that he was not liable for damages. Another point in this case is curious, as involving a legal doubt, that will probably receive its solution in a court of appeal. In point of law, Dr. Semple never signed a certificate at all; the paper he wrote was informal, and was never amended. How could he, therefore, be liable for proceedings taken upon it which were not even within his cognizance, and which it did not authorise?

But in the consideration of this question we will dismiss for the moment the plaintiff and defendant in this case; we will assume a certificate to have been perfected, and a sane man legally incarcerated till discharged by the proprietor of the asylum. In such a case is there any, and what, remedy? We are happy to say that such a case has never yet been recorded. Should it, however, occur, the mode of redress is obvious, and consonant with our ideas and right and justice. The proprietor of the asylum pleading the authority of the certificates, the alleged lunatic properly takes his action against the medical men signing them; he does not encumber the record with pleas of falsehood or malice, but simply proceeds as in an action for libel. Supposing Mr. Hall to be sane, it is obvious that Dr. Semple

libelled him in certifying that he was of unsound mind, and for that he is liable for damages, the amount of which a jury would probably estimate, supposing any charge of *mala fides* abandoned, not alone upon the time that the physician had given to the case, but also to the amount of previous study he had brought to bear upon the subject before he judged himself qualified to declare a fellow-citizen legally dead.

It must not be thought that in this view of the case we have any desire, by a legal quibble, to lessen the responsibility of medical men signing certificates of lunacy; we would only define exactly what their legal responsibilities are. In the event of a practitioner maliciously and falsely certifying a man to be insane, no punishment could be too great, whether that man was or was not carried off to an asylum; but his doing the same thing in good faith, and for the protection of the patient and the public, should be liable only to the ordinary proceedings all professional men are subject to for errors in judgment.

It may be said that in the case of *Hall v. Semple* the verdict of the jury would have been the same whether the action had been entered for libel or in the form it was. This may be so, but the length and cost of the proceedings would have been lessened, and, moreover, a precedent would not have been put upon the books which must virtually take the examination of doubtful cases of lunacy out of the hands of independent medical men; and no one will venture to sign a certificate of lunacy, however convinced he may feel that the patient is insane, because he cannot feel sure that the patient may not be dragged off the same night to an asylum, whose proprietor may, nevertheless, differ in opinion from the medical man, and so render him liable to an action, and throw upon him all the odium attending the assault that has been committed. Until the case of *Hall v. Semple* is finally decided we would advise medical men who know nothing of lunacy, or have only that dangerous knowledge of it that is still more mischievous, to abstain from signing certificates of lunacy in doubtful cases, unless their opinion is fortified by some physician who may be supposed to really know something of the subject; and we would counsel that section of the public who were clamouring last year to deprive themselves of the advantage of the experience and knowledge of "mad doctors" in courts of law, and in the signature of certificates, whether any case could have been worse managed than that of *Hall v. Semple*, in which not one mad doctor was engaged.

We would touch very gently upon one other feature in this remarkable trial. Now that the eloquent tones of the talented counsel for the plaintiff cease to vibrate upon the ears of the jury, are they still so certain that Mr. Hall is as injured as they supposed? The learned Master in Lunacy, in the case of Mr. Windham, properly dwelt

upon the fact that the existence or non-existence of insanity is one of "evidence and degree." We do not believe that Mr. Hall is a dangerous lunatic; but we are by no means inclined to imitate the example of the jury, and declare him positively of sound mind, while he continues to "intimate" that his wife is an adultress. It is true that jealousy is no proof of lunacy, but a medical practitioner may be forgiven if he should be doubtful as to the perfect sanity of any man who is said to insinuate that his wife has been guilty of adultery, although no shadow of suspicion has ever rested upon her reputation, and he himself cannot apparently offer any reasonable grounds for his opinion. In the case of Mrs. Hall it should be remembered that such suspicions would seem more than absurd, if the medical man were cognizant of the facts that the wife was of fair character, of advanced age, the mother—indeed, the grandmother—of many children, and living at that moment under her husband's roof.

But whether Mr. Hall was or was not of sound mind on the 29th of July, 1862, there can be no doubt that, even if insane, he suffered a grievous wrong in being dragged with brutal violence to an asylum, in contravention of the usual forms of law; if sane, the wrong was still greater; in either case, the safeguards against error or malice that, as we maintain, the law of lunacy amply provides were, in his instance, flagrantly set at nought.

We do not say that Dr. Semple was altogether blameless in this sad affair; we have pointed out where we think he erred; it may be also that he was mistaken in his opinion that Mr. Hall was of unsound mind, as he was in the idea that he was a dangerous lunatic; for such an error in judgment, if proved against him, he would be clearly liable to an action for libel; but we assert that, neither legally nor morally, is Dr. Semple responsible for the proceedings connected with his seizure, for which Mr. Elliot, the proprietor of the asylum, should alone answer.

A very slight examination of the question will, we think, render it obvious, not only that this is really the law of the case, but that it is for the best interests of the public that the law should be so laid down. The proprietors of asylums are bound to be well acquainted with the symptoms of insanity, and perfectly familiar with all the legal formalities bearing upon its treatment. If they are once allowed to evade this responsibility, the result will be most disastrous, inasmuch as their superior knowledge will cease to be necessarily trusted to detect the error or prevent the wrong for which it properly renders them liable. The public, through the press, loudly proclaims its fear that under the present law termagant wives or unscrupulous relatives, aided by inconsiderate medical practitioners, may legally incarcerate sane men in lunatic asylums; but surely Mr. Hall's case does not warrant this alarm. It is true that he was captured and imprisoned, but so he might have been "burked" or "garotted;" one proceeding

was as little warranted by the law of lunacy as the other. The jury were as incorrect in fining Dr. Semple for proceedings which his isolated and incomplete certificate did not justify, as they would have been had they brought *him* in as guilty of murder supposing that the keepers sent to seize Mr. Hall had killed him in the struggle.

It has never yet happened—in the case of Mr. Hall it certainly did not happen—and we believe under the existing law it never can happen, that a sane man should be dragged to an asylum, under two certificates of lunacy and an order from a relative, except as the result of wicked and useless conspiracy, which would, in asylums under the supervision of the Commissioners in Lunacy, meet instant discovery and punishment. That such a wrong may be perpetrated through error or ignorance on the part of two medical men is a new ground of alarm, which, as we have seen, Mr. Hall's case does not justify; for we contend that the greatest safeguard against this existed in the fact that, till this verdict, the proprietors of asylums were deemed primarily responsible for any wrongful detention of a patient, inasmuch as their position should presume their competency to discover any error, and their means of observation should render such discovery easy and certain.

But, we repeat, it would be a great mistake to imagine we advocate the monstrous doctrine, that a man who is a registered surgeon or apothecary, is therefore chartered to issue with impunity certificates of lunacy against any one whom, in his ignorance or haste, he may choose to consider insane; the common law of England provides a remedy against such an abuse, and it is essential for practitioners to remember, when called upon to sign certificates of lunacy, that, however *bonâ fide* their opinion may be, it renders them liable to an action for libel, whether their certificate is or is not followed by the committal of the patient to an asylum. We do not object to this severity in the law; the liberty of the subject cannot be too zealously guarded; and so far from believing that the grievous wrong suffered by Mr. Hall should go unpunished, we avow our conviction that he would have been justified, both in law and in equity, in proceeding against the servants of Mr. Elliot for a brutal assault, and also against Mr. Elliot, the proprietor of the asylum, who illegally received and restrained him. But this trial of *Hall v. Semple*, if the verdict of the jury stand, goes a step beyond, and raises a new point, which we think has pressed hardly upon Dr. Semple, and will be found eventually mischievous to the public, as deterring practitioners from signing certificates of lunacy, although the safety of the patient or his friends require they should do so.

Law-breakers cease to fear the law when the penalties attending its violation become uncertain; law becomes a terror to the good when it is uncertain in its definition of what is or is not unlawful

Mr. Hall did not choose to proceed against Mr. Elliot; he does not think it right to enter an action for libel against Dr. Semple; was it because he feared that such a course would produce but scanty damages? He, however, files a declaration, upon every count of which he is defeated, and at last wins his cause by the judge amending the word malice, and leaving the question to the jury—whether they found Dr. Semple guilty of culpable negligence?

If the verdict against Dr. Semple stand, the signing of certificates of lunacy will for the future be fraught with peril. How is negligence to be defined? How long should physicians examine personally, and perhaps exasperate, alleged dangerous lunatics, with arms in their houses? How many and what inquiries are they to make before they may safely express their conviction that a man is insane, whom they believe to be so, without a dread of damages for negligence, in addition to an action for libel? Some physicians can detect the signs of lunacy, not its imitation: are they liable for damages if, in a case of feigned insanity, they unsuspectingly sign a certificate? Again, are physicians who, by placing patients under restraint who have attempted or threaten suicide, liable to the accusation of negligence for not seeing that such patients were only suicidal, not insane?

The question of culpable negligence in declaring a man insane cannot be left to a jury, unless they try also the issue as to whether the man was sane at the time of such declaration, as they must do if the action were one for libel. The learned judge in the case of Mr. Hall expressly warned the jury that they were not to try the sanity or insanity of the plaintiff (report in the 'Times'); it is singular, therefore, to find that the jury declare Mr. Hall to be sane, which they were told not to consider, and which is clearly irrelevant, and finding Dr. Semple negligent in thinking him insane five months before, although they had most imperfect evidence before them to prove he was otherwise, the only independent practitioner called for that purpose having signalised himself by declaring, in cross-examination, that delusions did not prove insanity. We will only conclude by addressing to Dr. Semple the pertinent question of Montague Chambers:—"Why, sir, did you not consult in this case some of those gentlemen who make insanity their study?" and by recalling to the memory of the jury and the public the solemn words of the Judge—it "would be dreadful if a medical man were to be visited, in cases of this kind, for consequences arising from mere error in judgment or mistake in fact."

T. HARRINGTON TUKE.

PART V.--NEWS, CORRESPONDENCE, APPOINTMENTS, LIST OF MEMBERS, &c.

Proposed Library of the Association.

THE President and Committee desire to bring before the Association the question of gathering a small library composed of the English and Foreign Journals of Insanity, of asylum reports and similar papers, to which hereafter, by purchase or donation, the standard works in psychology might be added.

Even in London there exists no complete series of these journals and reports, the best collection being that in the College of Surgeons' library. It is self-evident that a complete series of these papers ought to be in the possession of the Association. The same observation applies to the several reports of the Commissioners in Lunacy in England, Scotland, and Ireland.

The editor is endeavouring to arrange a complete series of exchanges with all the journals on insanity published in Europe and America. Again, if the superintendent of each asylum would send a complete set of the published reports and rules of his asylum, a nucleus for the collection would soon be formed. A similar success might, it is hoped, attend the application by this Association to the Commissioners in Lunacy for a copy of their reports. The several parliamentary returns might also readily be obtained, and it is believed that authors (members of the Association and others), would, from time to time, add copies of their published works to the collection. The honorary secretary (Dr. Harrington Tuke) has placed a room in 37 Albermarle Street at the free disposal of the Association for the safe custody of such a library—a room which will, at all times, be open to the members of the Association who may wish to consult their books. The President and Committee trust, therefore, that this appeal may not be made in vain. They undertake that the reports thus sent shall be bound in their series of years, marked with the name of the Association, and carefully preserved with all other books and documents which may from time to time be added by gift or otherwise to the library.

The receipt of any reports or books thus presented will be duly acknowledged in the Journal. Dr. Erlenmeyer, editor of the 'Archiv. der Deutschen Gesellschaft für Psychiatrie,' offers a copy of a large work on 'Asylum Construction' which he has in the press for this proposed library, and there exists both in Germany and France a great willingness on the part of alienist physicians to bring their writings under the notice of their English brethren, so that the editor feels confident that this appeal would be liberally responded to from abroad.

The Yarra Bend Asylum, near Melbourne.

The lunatic asylum for the great colony of Victoria is at Yarra Bend, Melbourne, and contains upwards of 700 patients. This asylum has been under the superintendence of Dr. Bowie, who, in May last, brought an action for libel against the proprietors of the 'Melbourne Argus,' for various articles in that paper impeaching the excellency of his management. The 'Argus' pleaded justification, and thereupon ensued a nine days' trial, the report of which would, at least, fill two numbers of this Journal. Except on one point, namely, the alleged pregnancy of a patient, who turned out to have been a servant, the plea of justification was maintained. The revelations of the trial form an admirable picture of the old concomitants of restraint; it is like reading from the reports of the Parliamentary Committee in 1815. There is neither novelty nor instruction in it that we should cumber our pages with any lengthened account of the manner in which lunatics are treated in the richest of our colonies. The following extract is from the evidence of Mr. Whittenbury, a surgeon, who recounts what he saw when he was visiting the asylum to see a friend.

"I will mention one particular circumstance. Having heard that there were patients under restraint at Yarra Bend, and not having seen anything of the kind, I asked Dr. Bowie if he would show me some patients under restraint. He said, 'Oh, yes; I will show you several.' He showed me one case. I believe the patient was a man named McDonald—a tall, powerful man. I believe he had not been attended to for several days. At all events, Dr. Bowie said—calling to some of the keepers—'We had better attend to this case now; Dr. Whittenbury wants to see it.' At a given signal, the bolts were shot, and four attendants sprang into the cell. Two of the men seized the patient by the neck and shoulders, and the others seized him by the legs. The four men then threw him upon the ground, and held him there, while a fifth attendant removed some straw and dirty things out of the cell. This occurred about four or five o'clock in the evening. The cell was very dirty. The attendant who took the straw away afterwards returned with some clean sheets and a blanket or rug. The patient was naked, with the exception of having on what is called a lunatic or skeleton jacket, which fastened the upper portion of the arms to the breast. To effect their escape from the cell, the attendants bound the patient's legs and feet together, and then rushed out, and bolted the door after them. The lunatic's strength was so great that he immediately jumped up, and almost instantaneously burst his bonds asunder, and sprang at the grating of the cell. I had never seen such a case

in my life before, and was quite shocked. The cell was a stone cell. No doubt the circumstance of the four men springing upon the lunatic irritated him. I should think it was altogether unnecessary to use such violence, from what I have read as to the treatment of violent lunatics."

This is just old-fashioned brutality, and the rage and fear which it generates; but Dr. Bowie was an ingenious man, and did not by any means adhere to the old path. As an example of this, take his method of preventing escapes by padlocking patients together. O'Grady, an attendant, said; "In one case, in which two patients tried to run away, they were put in jackets and padlocked together, side by side. They only remained in that position five or six days. They were connected together in that manner all the day, except at meal hours, but not at night."

Dr. Bowie freely admits the fact, and explains it thus:

"Melbourne and Hughes combined together to effect their escape, and Melbourne got upon the parapet of a wall with that object in view. I therefore considered that I was justified in fastening them together. It was done without any ill-nature, but for the purpose of making them tired of each other's company, and preventing them associating with each other for the future. The restraint did not cause them any pain. I had used it with two patients before, for the same object, and it answered exceedingly well. In that case, the two men had been exceedingly troublesome, and I fastened them together for two or three days. One of them said, 'If I was only quit of this partnership, I would not behave so again.' He behaved very well after they were separated."

This Siamese-twin plan of restraint was certainly ingenious, but Dr. Bowie's highest flight of invention was his discovery of a peculiar method of restraint, of which, pretty well posted up as we are, we have never before heard. This is Dr. Bowie's own description of the invention, and the manner in which it was used.

The Attorney-General.—"With regard to the bags, will you explain to the jury what they are, and where they were borrowed from?"

"The origin of their invention is very simply told. When I was in practice in Scotland I had the charge of an insane woman, upon whom we could get no strait-jacket or anything else to secure her. *I then bethought myself of a sack.* We got one, made it into a kind of dress, and put her into it, and I had the satisfaction of seeing that woman cured. I saw the advantages of the thing, and I used it afterwards. It was used in the asylum to keep the patients warm, and to prevent them injuring themselves. An insane person will often throw himself out of bed, leaving his bedclothes behind him; and to prevent him taking cold, we roll him in a blanket, and then put him into the bag. It was never used as a punishment. My

directions to the attendants were, never to use a jacket or bag without consulting me. If an extreme case arose, a man might be put into a jacket, but I must be told immediately. If an attendant had not done this, he would have been discharged. The bags were of different sizes. None of them were tight. A patient in a bag had more freedom for his hands than in a jacket. My positive instructions were, that if a patient relieved himself in his night-dress, another bag should be put on."

The opinion of the patients who had practical experience of the doctor's ingenious method of keeping them warm, was not quite so complimentary to it as the inventor no doubt would have desired.

Here is the description given of it by Dr. Carr, a much enduring patient:

"I remember being visited by Dr. M'Crea in September, 1858. I had been seven or eight days in continual restraint. A strait-waistcoat, padlocked, with the hands behind, was placed on me in the first instance. It was put on in such a way as to create actual physical torture. Over that waistcoat was placed a bag. There were three or four bags used in the asylum, with all of which I have acquaintance. The bag was not removed by an attendant for seven or eight days, and it was not until I was questioned by Dr. M'Crea that it became known that I succeeded in releasing myself from the jacket in the space of fifty-four hours after it was put on. The bag I could remove and put on at pleasure, so that I might appear, when any one entered the cell, in just the same condition as when the bag was first placed upon me. The jacket was put on in the afternoon, and the bag not until the evening. Before the bag was put on I managed to make a small orifice in the canvas stitching, and acting on that, and breaking a padlock, I was enabled ultimately to free myself.

"I made a complaint to Dr. M'Crea, and also, I think, to Dr. Eades and Mr. Barker, of the treatment which I had received. The result of this complaint was, that I was replaced in the canvas jacket. Dr. Bowie came to the door of the cell, and said he did not care what orders the Board gave, I should be placed under restraint, and should so remain as long as I was in the asylum. My hands were padlocked up against the shoulder-blades, and I suffered in consequence a greater amount of physical pain. I had not committed, by deed or word, any breach of the regulations. The jacket was kept on about half an hour, when Mr. Barker entered the cell, and by his orders the jacket was removed. I will describe the feelings which I experienced the first night on which I was put into the bag. The bag was composed of strong No. 1 canvas, impervious to water, which was passed over the feet, and slipped up the body, fitting closely, the hands having to be placed flat against the sides. *The bag came close round my neck—so close, indeed, that even the bugs could not get ingress*

between the bag and the neck. I continually passed urine into the bag, and there it was next morning, accompanied sometimes with faecal matter. The head was not protected from vermin, though sometimes by day, and occasionally by night, a stiff canvas cap was added, and padlocked under the throat. *My own head was bitten all over with bugs and fleas—particularly bugs."*

The poor doctor did not succeed in his intention to describe his feelings, but he said enough to enable us to guess what they must have been like; fastened in a water-tight sack, with his arms close by his sides, his head and face bitten all over with fleas and bugs, particularly bugs, but the sack so tight round his throat that the bugs could not get down, and the whole body in a filthy water-tight stew. Faugh!!!

Dr. Carr does not say that the treatment he endured was barbarous; but Dr. M'Crea, the visiting physician to the asylum, does say so, for the following passage from his evidence refers to the particular occurrence described by Dr. Carr:

"The proportion of patients restrained was large—much larger than it ought to have been. The means of restraint used were bags, jackets, and mittens. Dr. Bowie always represented to me that the bags were used at night, especially in winter-time, to prevent patients catching cold. If they were used only for that purpose, I can't imagine there would be any objection to them. There were a number of restless patients, who would not lie at night with the bedclothes over them, and it was necessary to put on them these bags, which were lined with flannel. But on the 7th of September, 1858, during an official visit, I found a patient in a bag of a very different character. That patient was Dr. Carr. To the best of my recollection, that bag was not lined with flannel, and it was fastened round the patient's neck. I forget the nature of the fastening—whether it was tied or padlocked. This was in the day-time, when a patient had no bedclothes to kick off. Dr. Carr said he had been there seven days. The bag was not very tight; he could move his arms inside; but the bag was to restrain him, not to keep him warm. I conceived the treatment improper and barbarous, and I ordered Dr. Carr to be taken out of the bag immediately. Dr. Carr was perfectly quiet and perfectly rational. His hands and nails were tolerably clean, and I asked him how he could reconcile that fact with the statement that he had been seven days in the bag. I understood him to say that, in forty-eight hours after he was put in the bag, he managed to free himself."

Here is the account of another patient from the evidence of Thomas Hugman, which is not at all more flattering to the system:

"There was a patient named Fitzgerald. He died on the 22nd of March last, near Dr. Callan's residence. He came up from H ward. He was very sickly and feeble, and seemed terrified. He was very

destructive with regard to his clothes, and, in consequence, was put into a bag during the night. It was a narrow kind of bag, made of very rough canvas—what sailors would perhaps call No. 3 canvas. It was very dirty—almost black.

“Fitzgerald was confined in that bag all night. He could not move his arms. He was placed on the bed, and lay there like a mummy. The bag was fastened by leather straps and a padlock. In the day-time, he was put into the airing yard. He had on some patent gloves—canvas gloves without fingers, fastened by a leather strap and padlock which screwed up, and if screwed up tight, would give excruciating pain to any man.”

It would appear that the sacks were used very freely. Dr. Michael Barry, who visited the asylum officially, as it would seem, in company with the Mayor of Melbourne, says :

“I have seen most of the principal asylums in France, Ireland, and England. I was struck with the appearance of great despondency presented by the patients at Yarra Bend Asylum. Although things appeared clean to the eye, they were unpleasant to the nose. Almost everywhere there was an offensive smell, particularly in the dormitories and airing ground. There was particularly a smell of urine. That struck me to be the case almost everywhere I went. I thought the per-centage of restraint used at the asylum was most unnecessary. There seemed to be various bags and sacks used for restraint. I saw seven or eight people shut up in things of that kind.”

There were complaints about the food also, and the poor patients at Yarra Bend might have exclaimed with Prince Hal, “Oh, monstrous ; what, only two pennyworth of bread to all that sack !”

Dr. Bowie, indeed, though not a very wise man, might have been called the great Sackem of Melbourne. However, it is said that he is going, or gone, so that we may infer, *argol*, that he has himself been invested with the collar and badge of the sack.

There is much more instructive matter in the report of the trial than we are able to extract, which we regret, for we trust that it will be long before we again have such an opportunity of enriching the anthology of restraint. It is an old tale, that the habitual use of restraint is accompanied by everything else which is objectionable in the management of an asylum, and especially by a disregard of all proprieties and decencies, and we are therefore not surprised to find proof of all this in this Yarra Bend trial. Let the following little fact show what the cleanliness of the place must have been. Samuel Wainwright, a former attendant, said : “The wards were cleaned with sand and lime. Soap and water were not used. If there was any dirt the sand and lime would be left on. You can hide dirt with sand and lime, but you cannot remove it.”

Dr. Bowie did not deny the fact of his mode of cleaning, and gave the credit of it to the Commissioners in Lunacy. “Hot sand

and lime were used to scrub out the cells. The patients were not in the cells at the time. The sand and lime were scrubbed off in half an hour after they were put on. That process is recommended by the Commissioners of Lunacy. It takes away all the offensive smell." In the same spirit, we suppose, he made use of Dr. Conolly's authority for fastening patients to their bedsteads at night, and asserted that in every English asylum he had visited, mechanical restraint is used. Of a verity, ideas do seem to stand topsy-turvy at the antipodes.

We are happy to say that the Victorians commissioned the member for Pontefract, our old colonist, to send them out a medical superintendent from home, and that Dr. E. Paley, late of Camberwell House, a member of this association, has been selected for the office, and sailed on Christmas Eve.

Dr. Paley carries with him to his distant home the warm wishes of all who know him. No better man could have been found to represent English Psychology in this distant colony. Dr. Paley combines experience, temper, and judgment, and he has invariably gained the respect and esteem of all with whom he has worked. We found him a formidable as well as courteous opponent at the election to the Sussex Asylum in 1858. We trust to hear from Dr. Paley of his impressions of the colony of Victoria. The salary of the appointment is £900, with allowances equal to £400, including a house.

Death of Sir Benjamin Brodie.

"On the eve of eighty years, a life not more distinguished by its length than by its usefulness and success, professional and social, came to an end at Brome Park, in Surrey, on Tuesday last. Sir Benjamin Brodie, whose death we have now to chronicle, had long been ailing; the great "medicine man" of our time having been racked with pains in the shoulder-joints, and with disease in the eyes, beyond the power of art to reach. Partial blindness had for some years past clouded his studies, as it had interrupted the discharge of his duties as President of the Royal Society. From the latter office he retired in favour of General Sabine. His mind, however, continued active in his study; he read and took part in the controversies of the day, and to the last kept a ready and flowing pen in his hand. Brodie was born on the 9th of June, 1783, at Winterslow, in Wilts, of which place his father was rector; was educated at home; was placed under Mr. Wilson at the Hunterian School in Great Windmill Street, whence he removed, in 1803, to St. George's Hospital, and became a member of the College in 1805. From that date his rise was steady, being helped by the literary power and professional success of his lectures. On the death of

Sir Everard Home, he succeeded to the vacant office of Serjeant-Surgeon, when he was made a baronet by King William. In 1851 he became a D.C.L. of Oxford, and in 1858 President of the Royal Society. The professional works of Sir Benjamin are very justly esteemed; the non-professional works, such as the recently-published 'Psychological Inquiries,' have less weight and value. The writer was a very clever surgeon, but he was not a man of genius. His mind was solid, practical, and commonplace. No great discovery will bear his name. But he will be remembered among his brethren as a man who not only raised himself in the world, but did something to elevate his craft. No surgeon before him had risen to the high dignity of President of the Royal Society. It was a position which remained to be won, and he won it. That will be his distinction with posterity."—*Athenæum*, October 25th, 1862.

Sir Benjamin Brodie was elected an honorary member of this Association in 1856, and was, he informed the present editor, a regular reader of the 'Journal of Mental Science.'

Appointments.

James Strange Biggs, M.D. St. And. M.R.C.P., to be Medical Superintendent of the Surrey County Asylum, Wandsworth.

William Godwin Coombs, M.D. St. And., Assistant Medical Officer to the Devon County Lunatic Asylum, Exminster.

F. H. Hargood, M.R.C.S. Eng., late Assistant Medical Officer to the Middlesex County Lunatic Asylum at Colney Hatch, to be Assistant Medical Officer to the Lancaster County Lunatic Asylum, Rainhill.

William Helps, M.D. St. And., F.R.C.P. Edin., to be Resident Physician to the Royal Hospital of Bethlehem.

H. W. Jackson, M.R.C.S., to be Assistant Medical Officer of the Surrey County Asylum at Wandsworth.

John Meyer, M.D. Heidelberg, M.R.C.P., to be Medical Superintendent of the Criminal Lunatic Asylum at Broadmoor.

William Orange, M.R.C.S., to be Deputy Superintendent of the Criminal Asylum, Broadmoor.

Edward Paley, M.D. St. And., M.R.C.S., to be Medical Superintendent of the Yarra Bend Asylum, Melbourne, Victoria.

George Paterson, M.D. Edin., F.R.C.P. Edin., to be Deputy Commissioner in Lunacy for Scotland.

J. Yellowlees, M.D. Edin., to be Medical Superintendent of the District Asylum, Stirling.

GENERAL STATISTICS OF ASYLUMS FOR THE INSANE.

By J. MUNDY, M.D., of MORAVIA.

FIRST ARTICLE.

At the request of our English colleagues, we have prepared General Statistics of all Asylums for the Insane in the World. As we here add only common observations, and these quite objectively, we reserve to ourselves the right to make some special remarks at the end of our articles and conclusions of our Tables. We commence, of course, with Europe, and shall follow with the Colonies, America, and so on. The 1st January, 1861, is our guiding date, and we can certainly not be responsible for any changes and mistakes to which such statistical labours, are always exposed. We compose our first article, namely, Germany, from the sources of Dr. H. LAEHR's, of Berlin, well-known publication, with our own rectifications and additions.

EUROPE.
I.—GERMANY. A.—AUSTRIA.

Country.	Number.	County, Department, or Province.	Name of the Town.	Name of the Asylum.	Public.	Private.	Name of the Superintendent.	Name of the Assistant Medical Officer.	The Number of Patients on the 1st January, 1861.			OBSERVATIONS.
									Male.	Female.	Total.	
AUSTRIA.	1	MORAVIA	Brünn	Brünn	1	—	Dr. Czermak	Dr. Kesler	63	69	132	The building is quite new, and will be opened in the spring of 1863. It is situate near the village Czernowitz, two miles from Brünn,* the capital of Moravia. No cretins.
	2	STYRIA	Graetz	Graetz	1	—	Dr. Von Vesta	Dr. Lang	71	85	156	The building is old, and the average of ten years shows that 159 patients have been daily treated there. Graetz* is the capital of Styria, and has also a small asylum for cretins. The number of cretins in Styria is altogether 5856.
	3	TYROL	Hall	Hall	1	—	Dr. Stolz	Dr. Rodi	99	15	114	The building is old, and only for curable and very dangerous patients. Hall is four miles from Innsbruck,* the capital of Tyrol. Tyrol has 83 cretins.
	4	KÄRNTHEN	Klagenfurth	Klagenfurth	1	—	Dr. Kumpf	Dr. Hussa, Jun.	20	19	39	The building is old. Klagenfurth* is the capital of Kärnthen, which Austrian province has 3058 cretins. In the town of Reisberg one in every eleven persons is a cretin.
	5	KRAIN	Laibach	Laibach	1	—	Dr. Zhuber	—	14	14	28	The building is old. Laibach* is the capital of Krain. 250 cretins.
	6	GALIZIA	Lemberg	Lemberg	1	—	Dr. Berthleff	Dr. Bek	86	78	164	It is only a division in the town hospital. In 1860 the number of patients increased to 330. No cretins. Lemberg* is the capital of Galizia.
	7	UPPER AUSTRIA	Linz	Prunner Slift and Paradeys	1	—	Dr. Knörlein	Dr. Schasching	76	72	148	It was built 120 years ago, and originally destined for poor citizens, and was used as an orphan asylum until 1784. Subsequently, in 1833, was converted to an asylum for the insane. The so-called "Paradeys," in the first instance, was a private house, and in the year 1852 was purchased and added to the "Prunner Slift." The asylum is situate one mile from the town of Linz,* the capital of Upper Austria. The number of patients in 1860 was 205. The asylum is always crowded. Upper Austria reckons 3703 cretins.
	8	HUNGARY	Ofen	Ofen	—	1	Dr. Schwartzter	Dr. Bolyö	17	13	30	Up to the present time in Hungary the proposal for a public asylum has only been made, but nothing definitively determined on, although the money is ready. At the Island of Cepel, four miles from Pesth,* there is a private institution, with "family treatment."
	9	BOHEMIA	Prague	St. Katherina and Slup	2	—	Dr. Köstl	Dr. Kuttil, and four Assistant Medical Officers	336	269	605	Prague,* the capital of Bohemia, has two large and well-situated asylums. St. Katherina has a fine exterior, with commodious gardens. "Slup," where now are only female patients, has accommodation for 120 patients, is quite new, with a separate chapel, and one mile distant from St. Katherina; it contains twenty-two rooms and two halls, and has a special medical officer, Dr. Smoler. Air and light are the great advantages of this beautiful modern asylum; the windows and stairs are magnificently arranged. The cost of building this asylum, which was only opened two years ago, was remarkably small, altogether not more than £6000.
	10	SALZBURG	Salzburg	Salzburg	1	—	Dr. Zillner	—	27	32	59	The building old (1818), restored in 1852, with a separate division near the asylum, called the "Leprosenhouse," in which are twenty patients. The Salz Kammergut, of which Salzburg* is the capital, has 1136 cretins.
	11	TRIESTE	Trieste	Trieste	1	—	Dr. de Dreer	One Medical Officer	99	37	136	Trieste* is the capital of the Coast country "Küstenland." For the neighbouring Istria it is proposed to establish an asylum at Göriz.
	12	SILESIA	Troppau	Troppau	—	1	Dr. Rokita	One Medical Officer	29	22	51	The asylum is only a division of Dr. Heidrich's so-called hospital. The incurable patients are sent to the asylum in Brünn, Moravia, as Silesia is the adjoining country, and Troppau* its capital.
	13	LOMBARDO VENETIA	Venetia	St. John's and St. Paul's Hospital San Servolo Mantua	3	—	The Medical Superintendent of the Hospital Dr. Saccardo Superintendent of the Hospital	Assistant Officers of the Hospital The Reverend Brother Portalupi None	— 350 20	300 — 30	300 350 50	Until the year 1802 Venetia* had no asylum for insane. From a legacy of 55,000 ducats left by the last Venetian Doig, "Ludovico Manin," the second-mentioned asylum, of the Island of Servolo, was established. This asylum was visited and very properly described by Dr. Robertson in the 'Asylum Journal of Mental Science,' in January, 1858, for which reason we abstain from any remark in respect to it. San Servolo is only for male patients. At the present time a very fine asylum is being built for female patients in the Island of St. Clemente, Venetia. The first numbered is a division of St. John's and St. Paul's Hospital, and was formerly a Dominican monastery, and is only for female patients. 50 per cent. of the patients suffer from pellagra. The third mentioned is situate in Lombardy (the Austrian part of), only for incurables.
	14	LOWER AUSTRIA	Vienna	Vienna, Am Bründelfeld	1	—	Dr. Riedel	Drs. Mildner, Maresch, Richter, Loewinger, Preleitner, Pelser Fornberg	378	413	791	The building is modern (1849), and only opened in 1853. The asylum has seven-five acres of land. The number of patients in 1860 increased to the incredible figure of 1587, from which number 797 were discharged in the same year.
	15	LOWER AUSTRIA	Vienna	The Tower	1	—	Dr. Riedel	Drs. Joffe and Güyras	—	—	—	The number of the incurable patients which alone are received in this tower (called "Narren-Thurm") varies much, and is included in the first figures. The tower is an old horrible building of 1784, with all the recollections of the barbarous treatment of that age.
	16	LOWER AUSTRIA	Vienna	Upper Doebling	—	1	Dr. Leidesdorf Dr. Obersteiner	Dr. Breslauer	11	22	33	Well situated, with a beautiful park, three miles from Vienna,* established by Dr. Görgen, whose son, and late superintendent, died last year, to the regret neither of science nor humanity. Dr. Leidesdorf, one of the present superintendents, is also a lecturer on mental science at the University in Vienna.
	17	LOWER AUSTRIA	Vienna	Vienna	—	1	Mrs. Papst	Dr. Zimmerman	6	23	29	Private establishment for the higher class in the "Landstrasse" suburb.
	18	LOWER AUSTRIA	Vienna	Vienna	—	1	Dr. Treu	—	8	15	23	Ditto for middle class.
	19	LOWER AUSTRIA	Ybbs	Ybbs	1	—	Dr. Spurzheim	Dr. Hornung	105	128	233	Was formerly a very old building, and only enlarged and re-opened in October, 1862, and has accommodation for 600 patients. The next railway station is "Kennelbach,"* two miles from Ybbs.

* The stars in the observations at the different towns show the railway stations.

BOOKS RECEIVED.

'Epilepsy : its Symptoms, Treatment, and relation to other Chronic Convulsive Diseases.' By J. Russell Reynolds, M.D. Lond. pp. 360. London, Churchill, 1861. (*Reviewed in this number of the Journal.*)

'On Chronic Alcoholic Intoxication, with an inquiry into the influence of the Abuse of Alcohol as a predisposing cause of Disease.' By W. Marcet, M.D., F.R.S., second edit., pp. 258. London, Churchill, 1862. (*To be reviewed in a subsequent number.*)

'Air and Water : their Impurities and Purification.' By H. B. Condry, pp. 80. London, Davies, 1862.

The use of the Permanganates as a deodorizer is of special value in asylums for the insane, from the non-poisonous nature of these substances. We nearly lost a patient once, who managed to drink some chloride of zinc (Sir W. Barrett's fluid), which was being employed for sanitary purposes.

'D'une forme de Délire suite d'une surexcitation Nerveuse se rattachant à une variété non encore d'écrite d'épilepsie *Epilepsie Larvée.*' Par le Docteur Morel, pp. 28. Paris, 1860.

'De la Folie Héritaire, rapport Médico-legal, &c.' Par le Dr. Morel, pp. 29. Paris, 1862.

'Le non-Contraint ou l'Abolition des moyen coercitifs dans le Traitement de la Folie.' Par M. le Dr. Morel, pp. 117. Paris, 1860.

'Ueber die Physiologische Bedeutung der Religion.' Vortrag von Dr. Geerds. Berlin, 1862 (pamphlet).

'Die Seelen Heilkunde in der Gegenwart.' Vortrag von Dr. H. Lachr. Berlin, 1861 (pamphlet).

'Fünf Kardinal-Fragen der administrativen Psychiatrie.' Von Dr. Mundy, in London. Osnabrück, 1862.

A German reprint of an article contributed to the pages of this Journal.

'The Morningside Mirror' (monthly).

'The Antagonism of Law and Medicine in Insanity and its consequences, an introductory Lecture.' By Thomas Laycock, M.D. Edinburgh, 1862.

'Homicidal Mania, a Biography.' By Dr. Yellowlees. Edinburgh, 1862.

'Employment for Patients in British Lunatic Asylums.' By Edward Jarvis, M.D. Dorchester, Massachusetts, U.S.

PERIODICALS RECEIVED IN EXCHANGE WITH THE 'JOURNAL OF MENTAL SCIENCE.'

The Editor is desirous of extending the exchange list, and for which the Book-Post offers such facilities, both at home and abroad.

ENGLISH.

- 'The Medical Critic and Psychological Journal.'
- 'The Dublin Quarterly Journal of Medical Science.'
- 'The Medical Circular.'
- 'The Social Science Review.'
- 'The London Medical Review' (monthly).

AMERICA.

- 'The American Journal of Insanity.' (We were charged 1s. 2d. on the July number from the postage being underpaid.)

FRENCH.

- 'Journal de Médecine Mentale.'

GERMAN.

- 'Allgemeine Zeitschrift für Psychiatrie.'
- 'Archiv der Deutschen Gesellschaft für Psychiatrie und Correspondenz-Blatt.'

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Hayward's Heath, Sussex; or to the care of the publisher of the Journal, Mr. Churchill, New Burlington Street. French and German publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German and French agents, Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris.

After the first of January, 1863, the arrangements with the German Postal Union come into operation. A uniform charge of 3d. per two ounces is to be made on all books, printed papers, &c., between England and all parts of the German Postal Union.

The Editor requests that Asylum Reports may be sent to him in duplicate, one copy for the Journal, and the other for his private collection.

Dr. Arlidge, Newcastle-under-Lyme, being engaged on Lunacy Statistics, would be glad of copies of the several Asylum Reports as they appear.

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